

## Shareholder Information

The Liberty Global Group's Class A, B and C ordinary shares trade on the NASDAQ Global Select Market under the symbols LBTYA, LBTYB, and LBTYK, respectively. The LiLAC Group's Class A and C ordinary shares trade on the NASDAQ Global Select Market under the symbols LILA and LILAK, respectively, and the LiLAC Class B ordinary shares trade on the OTC link under the symbol LILAB. For descriptions of the Liberty Global Group and the LiLAC Group, see note 1 to our consolidated financial statements in the enclosed Annual Report on Form 10-K.

## Liberty Global plc

Griffin House 161 Hammersmith Road London W6 8BS United Kingdom Phone: +44 20 8483 6300

## Transfer Agent

Computershare
P.O. Box 43023
Providence, Rhode Island 02940
888 218 4391
(Outside the U.S.) +1781 575 3919

## Independent Certified

Public Accountants KPMG LLP 1225 Seventeenth Street, Suite 800 Denver, Colorado 80202

#### Forward-Looking Statements

This report contains forward-looking statements within the meaning of the Private Securities
Litigation Reform Act of 1995, including our expectations with respect to our 2016 and future growth prospects. See pages I-5, I-6 and I-7 of the enclosed Annual Report on Form 10-K for a description of other forward-looking statements included in this report and certain of the risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements.

### Notes on Defined Terms

Unless otherwise indicated in this report, subscriber growth statistics exclude subscribers of acquired entities at the date of acquisition, but include the impact of changes in subscribers from the date of acquisition. All subscriber/RGU additions or losses refer to net organic changes, unless otherwise noted.

As used herein, operating cash flow or OCF has the same meaning as the term "Adjusted OIBDA" that

## Investor Relations Contacts

ir@libertyglobal.com Oskar Nooij +1 303 220 4218 Christian Fangmann +49 221 8462 5151 John Rea +1 303 220 4238

## Corporate Communications Contacts

communications@libertyglobal.com Guto Harri +44 20 8483 6463 Matt Beake +44 20 8483 6428

## Annual Report on Form 10-K

Liberty Global's Annual Report on Form 10-K as filed with the Securities and Exchange Commission is available without charge (except for exhibits). Please contact Investor Relations.

is referenced in our Form 10-K. For our definition of Adjusted OIBDA and the related reconciliation, see note 18 to our consolidated financial statements in the enclosed Annual Report on Form 10-K. Rebased revenue and OCF growth is presented to show growth on a comparable basis by neutralizing the effects of acquisitions and foreign currency exchange rate fluctuations. For purposes of calculating rebased revenue and OCF growth, we have adjusted our historical 2014 revenue and OCF to (i) include the pre-acquisition revenue and OCF of certain entities acquired during 2014 and 2015 in the respective 2014 rebased amounts to the same extent that the revenue and OCF of such entities are included in our 2015 results and (ii) reflect the translation of our 2014 rebased amounts at the applicable average exchange rates that were used to translate our 2015 results. Our OCF margin is calculated by dividing OCF by total revenue for the applicable period. We define free cash flow or FCF as net cash provided by our operating activities, plus (i) excess tax benefits related to the exercise of share-based incentive awards, (ii) cash payments for third-party costs directly associated

with successful and unsuccessful acquisitions and dispositions and (iii) expenses financed by an intermediary, less (a) capital expenditures, as reported in our consolidated statements of cash flows, (b) principal payments on amounts financed by vendors and intermediaries and (c) principal payments on capital leases (exclusive of the portions of the network lease in Belgium and the duct leases in Germany that we assumed in connection with certain acquisitions), with each item excluding any cash provided or used by our discontinued operations.

#### Basis of Presentation

With the exception of Net earnings (loss) and Net earnings (loss) attributable to Liberty Global shareholders, all Operating and Financial information contained herein is that of our continuing operations.

#### Shareholder Letter

The shareholder letter should be read in conjunction with the earnings release that we issued on February 12, 2016.

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Inside back cover

Board of Directors

**Executive Officers** 



2015 was another year of solid performance for Liberty Global. We achieved all of our financial targets and finished the year with strong operating momentum, setting the stage for accelerating growth in the years ahead as we continue to invest, innovate and do more for our customers.

One of the most important trends across our markets is convergence. Whether using a fixed or mobile network, customers expect to be seamlessly connected on any device wherever they go. Earlier this year, we closed the acquisition of BASE in Belgium and we also announced a joint venture with Vodafone in the Netherlands, boosting our ability to provide converged services in two of our key markets. Another important transaction is the pending acquisition of Cable & Wireless, which will add substantial scale and position our Latin American and Caribbean business for continued growth and consolidation across the region.

Since the formation of Liberty Global over ten years ago, we have delivered 42 straight quarters of growth in subscribers, revenue and operating cash flow. Looking ahead, we see ample opportunity to deliver even better results as we embark on our new growth and transformation plan called Liberty GO, which is expected to accelerate our revenue and operating cash flow growth over the next three years.

## Results fueled by superior broadband

2015 was a growth year on virtually all fronts, as our customer activity and financial performance continued to improve throughout the year. Driven by strong demand for our market-leading broadband products, we added 870,000 new subscribers last year, on an organic basis, as we continue to set the gold standard in terms of download speeds. We ended the year with over 27 million unique customers subscribing to 57 million video, voice and broadband services. We also won more than 450,000 post-paid mobile subscribers during the year, which highlights the growing importance of converged services to our customers.

On the financial front, we achieved all of our full-year guidance targets. Revenue increased to \$18.3 billion, representing rebased growth of 3%, while operating cash flow rose 4% to \$8.7 billion on the same basis. Our OCF margin improved by 70 basis points to 47.4% last year, as we continue driving scale efficiencies across our business. Meanwhile, our free cash flow surged more than 20% to \$2.5 billion for the full year, exceeding our guidance for mid-teens growth.

## Our new plan for growth

Over the next three years, we expect our rebased OCF growth to accelerate to a 7%-9% compounded annual growth rate as we execute our bold new Liberty GO transformation plan. Supporting our value-creation strategy, Liberty GO aims to enhance our revenue and operating cash flow growth by focusing on new and existing revenue drivers as well as the implementation of a streamlined operating model.

To deliver on these ambitions, we are further embedding customer centricity across our operations. In 2015, we rolled out one global methodology to track Net Promoter Scores (NPS) across our markets, which helps us better understand our consumers' needs and prioritize our investments as we do more to improve the customer experience.

## Driving profitable market share

Our innovation, product development and technology investments are aimed at driving increased profitability in our core broadband and next-generation video products. Our state-of-the-art, fiber-rich networks remain a key differentiator for us, providing unrivaled connectivity with speeds of up to 500 Mbps, and with DOCSIS 3.1 technology becoming commercially deployable in the months ahead, we will extend our speed leadership to 1 Gbps and beyond in the near future.

In video, consumers continue to embrace our next-generation TV platforms, which provide seamless entertainment both in and out of the home, on all devices, with a deep catalog of movies and scripted series available anytime on demand, hundreds of apps, DVR functionality and, most importantly, a beautiful and intuitive user interface. Across these platforms, including Horizon TV, we attracted a record 1.5 million new subscribers last year, lifting our total advanced TV customer base to 6.5 million. Moreover, we expanded the availability of our TV Anywhere app, like Horizon Go, to all of our European markets and introduced exciting new products like Replay TV, which makes it easy for customers to catch up with their favorite broadcast TV shows.

## **Expanding our footprint**

New build projects are an important component of our Liberty GO initiative. Project Lightning in the UK, which is already underway, will add up to four million new homes to Virgin Media's footprint over the next several years, and it inspired us to pursue additional network expansion opportunities in other markets. As a result, we expect to connect seven million new premises over the next three years, including 1.5 million during 2016 alone. These projects not only make sense from a financial and strategic standpoint, they also generate significant economic and social benefits by connecting more people to the digital world.

Our network expansion projects should also fuel incremental customers for our rapidly growing B2B operation, by substantially increasing the number of businesses within reach of our networks. In 2015, our focus on driving penetration of the SOHO and SME segments continued paying off. Rebased revenue from business customers increased 9% to a record \$1.9 billion last year, demonstrating that our B2B efforts remain an important part of our growth story.

## Providing fully converged services

We also continue investing in our rapidly expanding out-of-home wireless solutions. Last year, we introduced mobile services in Ireland and Austria and we rolled out 4G services in the Netherlands, Switzerland and Chile - with more markets to follow this year. At the end of 2015, we served 4.8 million mobile subscribers across ten countries, generating \$1.5 billion in annual revenue - a rebased increase of 16% compared to the prior year. We are also significantly expanding the coverage of our pan-European WiFi network, which we expect will include over ten million access points by the end of 2016.

As customers increasingly expect seamless and ubiquitous connectivity, we aim to provide fully converged services offerings across our markets. In Belgium, we took an important step by recently acquiring BASE, the country's third-largest mobile network operator. We are taking a similar approach in the Netherlands with the proposed 50/50 joint venture between Ziggo and Vodafone's Dutch operation. By combining our fiber-rich broadband network with Vodafone's leading mobile business, we will create a national powerhouse with a full range of fixed and wireless services for consumers and businesses alike.

## Pursuing continued consolidation

Our ongoing strategy to create scale through strategic M&A enhances our ability to invest in the development of cutting-edge products and also helps create operational efficiencies. Over the next three years, our goal is to keep our indirect cost base flat as we optimize our external spend and complete our ongoing integration programs in, for example, the Netherlands and Belgium. In addition, we expect to realize approximately €3.5 billion of total synergies, on a net present value basis, as a result of our proposed joint venture between Ziggo and Vodafone NL.

Our business in Latin America and the Caribbean also had an eventful year, as we launched our LiLAC tracking stock in July and announced the \$8 billion acquisition of Cable & Wireless in November. This transaction will add substantial scale, unlock significant revenue, operational and capital synergies and position us for continued growth and consolidation across a region characterized by low broadband, video and mobile data penetrations.

## Commitment to levered equity returns

Consistent with our approach over the past decade, we remain convinced that prudent management of our capital structure will maximize long-term equity value. Our balance sheet is in great shape as we continue to capitalize on favorable market conditions, with \$4.9 billion of total liquidity at the end of 2015, along with a record low, fully-hedged borrowing cost of 4.9% and an average tenor on our long-term debt of more than seven years.

On the equity side, we repurchased a record \$2.3 billion of our own stock last year, including nearly \$900 million in the fourth quarter alone. We plan to complete another \$4 billion of buybacks by the end of 2017, which will bring our cumulative stock repurchases to more than \$18 billion since the company was formed back in 2005.

## Building a responsible, sustainable business

Our corporate responsibility and sustainability efforts focus primarily on digital inclusion and building trust with our customers. Across our markets we are undertaking dozens of important initiatives, from sponsoring coding workshops for kids to teaching senior citizens how to use the internet, and launching toolkits to help minors stay safe online. Going forward, we will continue to pursue opportunities to maximize the positive impact of our business and enrich our customers' lives in our increasingly connected, digital world.

## Doing more

In closing, we would like to thank our 37,000 employees, whose talent, commitment and hard work enable us to deliver on our growth agenda and to always do more for our customers every single day. We have never been more excited about our future and we appreciate your continued support.

Sincerely,

Michael T. Fries

President and Chief Executive Officer

April 14, 2016

John C. Malone

Chairman of the Board

# 2015 Key Figures

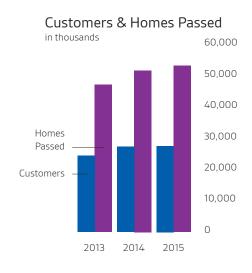
## Operating Highlights<sup>1, 2</sup>

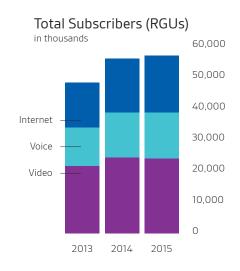
in thousands	2013	2014	2015
Homes Passed	47,240	51,946	53,392
Video Subscribers	21,788	24,336	24,046
Penetration (of homes passed)	46%	47%	45%
Voice Subscribers	12,115	14,331	14,882
Penetration (of homes passed)	26%	28%	28%
Internet Subscribers	14,365	17,275	18,120
Penetration (of homes passed)	30%	33%	34%
Total RGUs	48,268	55,942	57,048
Customer Relationships	24,497	27,310	27,472
RGUs per customer relationship	1,97	2,05	2,08
Mobile Subscribers	4,079	4,528	4,787

(1) When reviewing and analyzing our operating results and statistics, it is important to keep in mind that other third-party entities own significant interests in certain of our subsidiaries. For additional information, see note 18 to our consolidated financial statements in the enclosed Annual Report on Form 10-K.

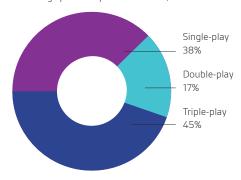
(2) Please see page I-10 of the enclosed Annual Report on Form 10-K for definitions of subscriber terms used in the Operating Highlights section.

6.5 million next generation video subscribers









# Financial Highlights<sup>1</sup>

\$ in millions	2013	2014	2015
Revenue			
Liberty Global Group			
European Operations Division			
Western Europe	11,872	15,745	15,983
Central and Eastern Europe	1,272	1,260	1,067
Central and other	-	(7)	(5)
Total European Operations Division	13,144	16,998	17,045
Corporate and other	76	70	42
Intersegment eliminations	(34)	(25)	(24)
Total Liberty Global Group	13,186	17,043	17,063
LiLAC Group			
LiLAC Division			
Chile	992	899	838
Puerto Rico	297	306	379
Total LiLAC Division	1,289	1,205	1,217
Inter-group eliminations	(1)	-	-
Total LiLAC Group	1,288	1,205	1,217
Total	14,474	18,248	18,280

## Revenue \$ in millions 20,000 16,000 12,000 8,000 4,000 0 2013 2014 2015

## Operating Cash Flow \$ in millions 10,000 8,000 6,000 4,000 2,000 0

2014

2013

Revenue by Region

## \$ in millions Western Europe 15,983 Central & Eastern Europe 1,067 Chile 838 Puerto Rico 379 Other 13

2015

iotal Lilac Gloup	1,200	1,205	1,217
Total	14,474	18,248	18,280
Operating Cash Flow (OCF)			
Liberty Global Group			
<b>European Operations Division</b>			
Western Europe	6,061	7,953	8,214
Central and Eastern Europe	585	583	474
Central and other	(240)	(282)	(289)
Total European Operations Division	6,406	8,253	8,399
Corporate and other	(169)	(212)	(223)
Intersegment eliminations	45	4	-
Total Liberty Global Group	6,282	8,045	8,176
LiLAC Group			
LiLAC Division			
Chile	354	351	328
Puerto Rico	107	129	167
Total LiLAC Division	461	480	495
Corporate and other	(2)	(3)	(4)
Total LiLAC Group	459	477	491
Total	6,741	8,522	8,667
Operating Income	2,012	2,228	2,349
Loss from continuing operations	(882)	(981)	(1,050)
Net loss	(906)	(647)	(1,050)
Net loss attributable to	(964)	(695)	(1,153)
Liberty Global shareholders			

# Our Operations



## UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

## Form 10-K

	ANNUAL REPORT PURSUANT TO SECTION 13 OR 15( For the fiscal year ended December 31, 2015	d) OF THE SECU	RITIES EXCHAI	NGE ACT OF 1934	ļ
	OR				
	TRANSITION REPORT PURSUANT TO SECTION 13 OF	R 15(d) OF THE SI	ECURITIES EXC	CHANGE ACT OF	1934
	For the transition period from to	110(0) 01 1112 01	Eccluries Enc	inition of	1,0.
	Commission file num	ber 001-35961			
	101				
	LIBERTY GLO	DBAL.			
	Liberty Glo	hal nlc			
	(Exact name of Registrant as s	-			
	England and Wales		98-11127	70	
	(State or other jurisdiction of incorporation or organization)		(I.R.S. Employer Iden		
G	riffin House, 161 Hammersmith Rd, London, United Kingdom		W6 8BS	,	
0.	(Address of principal executive offices)		(Zip Code		
	Registrant's telephone number, including area	44 200 402 4	(440 202 220 (6	00	
	Securities registered pursuant to			00	
	Securities registered pursuant to	Section 12(b) of the	Act.		
	Title of Each Class		Each Exchange on W	~	
Liber Liber I	erty Global Class A Ordinary Share, nominal value \$0.01 per share rty Global Class B Ordinary Shares, nominal value \$0.01 per share rty Global Class C Ordinary Shares, nominal value \$0.01 per share LiLAC Class A Ordinary Share, nominal value \$0.01 per share LiLAC Class B Ordinary Shares, nominal value \$0.01 per share LiLAC Class C Ordinary Shares, nominal value \$0.01 per share	N. N. N.	ASDAQ Global Selec ASDAQ Global Selec ASDAQ Global Selec ASDAQ Global Selec OTC Link ASDAQ Global Selec	t Market t Market t Market	
	Securities registered pursuant to Se	ction 12(g) of the Ac	t: none		
Indicat	te by check mark if the Registrant is a well-known seasoned issuer, a			act. Yes ☑ No	
	te by check mark if the Registrant is not required to file reports pursu				lo 🗹
Indicat	the by check mark whether the Registrant (1) has filed all reports requestion 1934 during the preceding 12 months and (2) has been subject to su	ired to be filed by Se	ection 13 or 15(d) o	f the Securities Excha	_
	te by check mark whether the Registrant has submitted electronically quired to be submitted and posted pursuant to Rule 405 of Regulation				Data
contair Form 1 Indicat	the by check mark if disclosure of delinquent filers pursuant to Item 4 med, to the best of registrant's knowledge, in definitive proxy or info 10-K or any amendment to this Form 10-K.   the by check mark whether the Registrant is a large accelerated filer, and "one:	rmation statements in accelerated filer, a	ncorporated by refer non-accelerated file	rence in Part III of this er or a smaller reporti	ng
La	rge Accelerated Filer ☑ Accelerated Filer □	Non-Accelerated Fi	iler   Smalle	er Reporting Compan	у 🗆
Indicat	te by check mark whether the registrant is a shell company as define	d in Rule 12b-2 of th	e Exchange Act. Ye	s 🗆 No 🗹	
which	the aggregate market value of the voting and non-voting common equity was last sold, or the average bid and ask price of ecently completed second fiscal quarter: \$44.2 billion.				
The nu	umber of outstanding ordinary shares of Liberty Global plc as of Feb	ruary 4, 2016 was:			
	Liberty Global ordinary shares LiLAC ordinary shares	Class A 252,805,601 12,630,744	Class B 10,472,517 523,423	Class C 581,034,556 30,773,233	

### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive proxy statement for the Registrant's 2016 Annual General Meeting of Shareholders are incorporated by reference in Part III of this Form 10-K.

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<sup>\*</sup> This copy of our 2015 Annual Report on Form 10-K includes Exhibit 99.1 (attributed financial information) but omits all other exhibits and financial statement schedules that are included in Part IV of our complete Annual Report on Form 10-K, as filed with the Securities and Exchange Commission on February 12, 2016. A complete copy of our 2015 Annual Report on Form 10-K that includes the omitted financial statement schedules is available on request.

#### Item 1. BUSINESS

#### **General Development of Business**

Liberty Global plc (**Liberty Global**) is an international provider of video, broadband internet, fixed-line telephony and mobile services, serving 27.5 million customers across 14 countries at December 31, 2015. Through our wholly-owned subsidiary Virgin Media Inc. (**Virgin Media**), we provide video, broadband internet, fixed-line telephony and mobile services in the United Kingdom (**U.K.**) and Ireland. Through Ziggo Group Holding B.V. (**Ziggo Group Holding**) and Unitymedia GmbH (**Unitymedia**), each a wholly-owned subsidiary, and Telenet Group Holding N.V. (**Telenet**), a 56.9%-owned subsidiary, we provide video, broadband internet, fixed-line telephony and mobile services in the Netherlands, Germany and Belgium, respectively. Through our wholly-owned subsidiary, UPC Holding B.V. (**UPC Holding**), we provide video, broadband internet and fixed-line telephony services in seven other European countries and mobile services through our wholly-owned subsidiary VTR GlobalCom SpA (**VTR**). In Puerto Rico, we provide video, broadband internet and fixed-line telephony services through Liberty Cablevision of Puerto Rico LLC (**Liberty Puerto Rico**), a 60%-owned subsidiary.

As a result of a series of mergers that were completed on June 7, 2013, Liberty Global became the publicly-held parent company of the successors by merger of Liberty Global, Inc. (the predecessor to Liberty Global) and Virgin Media. In the following text, the terms "we," "our," "our company" and "us" may refer, as the context requires, to Liberty Global (or its predecessor) or collectively to Liberty Global (or its predecessor) and its subsidiaries.

On July 1, 2015, we completed the approved steps of the "LiLAC Transaction" whereby we (1) reclassified our then outstanding Class A, Class B and Class C Liberty Global ordinary shares (collectively, the Old Liberty Global Shares) into corresponding classes of new Liberty Global ordinary shares (collectively, the Liberty Global Shares) and (2) capitalized a portion of our share premium account and distributed as a dividend (or a "bonus issue" under U.K. law) our LiLAC Class A, Class B and Class C ordinary shares (collectively, the LiLAC Shares). Pursuant to the LiLAC Transaction, each holder of Class A, Class B and Class C Old Liberty Global Shares remained a holder of the same amount and class of Liberty Global Shares and received one share of the corresponding class of LiLAC Shares for each 20 Old Liberty Global Shares held as of the record date for such distribution and cash was issued in lieu of fractional LiLAC Shares.

The Liberty Global Shares and the LiLAC Shares are tracking shares. Tracking shares are intended by the issuing company to reflect or "track" the economic performance of a particular business or "group," rather than the economic performance of the company as a whole. The Liberty Global Shares and the LiLAC Shares are intended to track the economic performance of the "Liberty Global Group" and the "LiLAC Group", respectively (each as defined and described below). While the Liberty Global Group and the LiLAC Group have separate collections of businesses, assets and liabilities attributed to them, neither group is a separate legal entity and therefore cannot own assets, issue securities or enter into legally binding agreements. Holders of tracking shares have no direct claim to the group's assets and are not represented by separate boards of directors. Instead, holders of tracking shares are shareholders of the parent corporation, with a single board of directors, and are subject to all of the risks and liabilities of the parent corporation. We and our subsidiaries each continue to be responsible for our respective liabilities. Holders of Liberty Global Shares, LiLAC Shares and any other of our capital shares designated as ordinary shares from time to time will continue to be subject to risks associated with an investment in our company as a whole, even if a holder does not own both Liberty Global Shares and LiLAC Shares.

The LiLAC Group comprises our businesses, assets and liabilities in Latin America and the Caribbean and has attributed to it (1) VTR Finance B.V. (VTR Finance) and its subsidiaries, which include VTR, (2) Lila Chile Holding B.V., which is the parent entity of VTR Finance, (3) LiLAC Holdings Inc. (LiLAC Holdings) and its subsidiaries, which include Liberty Puerto Rico, (4) LGE Coral Holdco Limited and its subsidiary and (5) prior to July 1, 2015, the costs associated with certain corporate employees of Liberty Global that are exclusively focused on the management of the LiLAC Group (the LiLAC Corporate Costs). Effective July 1, 2015, these corporate employees were transferred to LiLAC Holdings. The Liberty Global Group comprises our businesses, assets and liabilities not attributed to the LiLAC Group, including Virgin Media, Ziggo Group Holding, Unitymedia, Telenet and UPC Holding, including our direct-to-home satellite (DTH) operations based in Luxembourg, our corporate entities (excluding the LiLAC Corporate Costs) and certain other less significant entities.

Unless otherwise indicated, convenience translations into United States (U.S.) dollars are calculated as of December 31, 2015, and operational data, including subscriber statistics and ownership percentages, are as of December 31, 2015.

#### **Recent Developments**

Pending Acquisition of Cable & Wireless Communications

On November 16, 2015, we announced, pursuant to Rule 2.7 of the U.K. City Code on Takeovers and Mergers, the terms of a recommended acquisition of Cable & Wireless Communications Plc (CWC) for shares of Liberty Global in a scheme of arrangement. CWC offers integrated telecommunications-based services in over 40 countries located primarily in Latin America and the Caribbean. Under the terms of the transaction, CWC shareholders will be entitled to receive up to, in the aggregate: 31,651,616 Liberty Global Class A ordinary shares, 77,488,978 Liberty Global Class C ordinary shares, 3,648,524 LiLAC Class A ordinary shares and 8,939,328 LiLAC Class C ordinary shares. Further, CWC shareholders would be entitled to receive a special dividend in the amount of £0.03 (\$0.04) per CWC share at the closing of the transaction, which would be in lieu of any previously announced CWC dividend. We expect that the dividend and estimated fees and expenses will be funded from CWC liquidity, including incremental debt borrowings and LiLAC Group liquidity. Completion of the acquisition, which is expected to occur during the second quarter of 2016, is subject to, among other conditions, Liberty Global and CWC shareholder approvals, certain regulatory approvals and court sanction of the scheme of arrangement. In connection with the proposed acquisition, we entered into an agreement with CWC to, among other things, provide our reasonable co-operation to CWC to complete the acquisition. If the acquisition of CWC is not completed as expected, under certain limited circumstances, we could be required to pay CWC a termination fee of \$50 million.

Following completion of the acquisition of CWC, we intend to attribute CWC to the LiLAC Group, with the Liberty Global Group being granted an inter-group interest in the LiLAC Group. Based on the fully-diluted numbers of Liberty Global Shares, LiLAC Shares and CWC shares outstanding on November 16, 2015, after giving effect to the acquisition and such attribution, and treating Liberty Global Group's inter-group interest in the LiLAC Group as being represented by additional LiLAC Shares, Liberty Global Group shareholders would have had an approximate 67.4% ownership interest in the LiLAC Group.

### Acquisition of BASE

On February 11, 2016, pursuant to a definitive agreement and following regulatory approval, Telenet acquired BASE Company N.V. (BASE) for a purchase price of €1,324.4 million (\$1,500.5 million at the transaction date). BASE is the third-largest mobile network operator in Belgium. We expect that this acquisition will provide Telenet with cost-effective long-term mobile access to effectively compete for future growth opportunities in the Belgian mobile market. Telenet financed the acquisition of BASE through a combination of €1.0 billion (\$1.1 billion) of new debt facilities and existing liquidity. On February 4, 2016, the European Commission approved Telenet's acquisition of BASE following Telenet's agreement to divest both the JIM Mobile prepaid customer base and BASE's 50% stake in Viking Co NV to MEDIALAAN NV, which was announced in November 2015.

#### Choice Acquisition

On June 3, 2015, pursuant to a stock purchase agreement with the parent of Puerto Rico Cable Acquisition Company Inc., dba Choice Cable TV (Choice) and following regulatory approval, one of our subsidiaries, together with investment funds affiliated with Searchlight Capital Partners, L.P. (collectively, Searchlight), acquired 100% of Choice (the Choice Acquisition). Choice is a cable and broadband services provider in Puerto Rico. We acquired Choice in order to achieve certain financial, operational and strategic benefits through the integration of Choice with Liberty Puerto Rico. The combined business is 60%-owned by our company and 40%-owned by Searchlight.

For additional information on the Choice Acquisition, including related financings, see notes 4 and 10 to our consolidated financial statements included in Part II of this Annual Report on Form 10-K. In addition, during 2015, we completed various other smaller acquisitions and dispositions in the normal course of business.

#### Financings

• Virgin Media Refinancings. On March 30, 2015, Virgin Media Secured Finance PLC, a wholly-owned subsidiary of Virgin Media (Virgin Media Secured Finance), issued (1) \$500.0 million principal amount of 5.25% senior secured notes due January 15, 2026 and (2) £525.0 million (\$773.5 million) principal amount of 4.875% senior secured notes due January 15, 2027. On April 30, 2015, Virgin Media Secured Finance issued \$500.0 million principal amount of 5.25% senior secured notes due January 15, 2026, which were issued at 101% of par. The net proceeds from the foregoing senior secured notes were used to (a) redeem 10% of the principal amount of certain series of notes issued by Virgin Media Secured Finance in accordance with the indentures governing each of the notes and (b) prepay in full the outstanding principal amount of certain term loans under the senior secured credit facility of Virgin Media Investment Holdings Limited, a subsidiary of Virgin Media.

- 2015 Reorganization Transactions. During the first quarter of 2015, we undertook the financing transactions described below in connection with certain internal reorganizations of our broadband and wireless communications businesses in Europe, (1) a controlling interest in UPC Broadband Ireland Ltd. and its subsidiaries was transferred from a subsidiary of UPC Holding to a subsidiary of Virgin Media (the UPC Ireland Transfer), with the remaining noncontrolling interest transferred to another subsidiary of Liberty Global outside the UPC Holding borrowing group and (2) Ziggo Services B.V. and its subsidiaries were transferred from a subsidiary of UPC Holding to Ziggo Group Holding (the Ziggo Services Transfer). UPC Holding used the cash consideration received in connection with the Ziggo Services Transfer and the UPC Ireland Transfer of over \$2.0 billion to prepay in full the outstanding principal amount of certain notes, together with accrued and unpaid interest and the related prepayment premium, as applicable, under the UPC Broadband Holding Bank Facility and to redeem in full certain senior notes. Then certain UPCB Finance entities, which are special purpose financing entities that are wholly-owned by a Dutch foundation, used the proceeds from the forgoing prepayments to redeem in full or in part the outstanding principal amount of their respective senior secured notes.
- Ziggo Refinancing. Ziggo Bond Finance B.V. (Ziggo Bond Finance) and Ziggo Secured Finance B.V. (Ziggo Secured Finance) are special purpose financing entities that are wholly-owned by a Dutch foundation. On January 29, 2015, Ziggo Bond Finance issued (1) \$400.0 million aggregate principal amount of senior notes and (2) €400.0 million (\$434.6 million) aggregate principal amount of senior notes and (2) €400.0 million (\$434.6 million) aggregate principal amount of \$400.0 million and €400.0 million (\$434.6 million), respectively, with a subsidiary of Ziggo Group Holding. On February 4, 2015, Ziggo Secured Finance issued €800.0 million (\$869.3 million) aggregate principal amount of senior secured notes and used such proceeds to fund €800.0 million (\$869.3 million) aggregate principal amount of a senior secured proceeds loan with a subsidiary of Ziggo Group Holding as borrower. The proceeds from each of the foregoing loans were ultimately used to redeem certain amounts outstanding under the notes described below under "UPCB Finance Refinancing" of this section.
- UPCB Finance Refinancing. UPCB Finance entities are special purpose financing entities that are wholly-owned by a Dutch foundation. During 2015, UPCB Finance IV Limited issued (1) \$800.0 million aggregate principal amount of 5.375% senior secured notes (2) €600.0 million (\$652.0 million) aggregate principal amount of senior secured notes and (3) an additional \$340.0 million principal amount of 5.375% senior secured notes, the proceeds of which were used to fund UPC Facilities AL, AK and AL2, respectively. UPC Facility AL2 was subsequently merged with UPC Facility AL. The net proceeds from UPC Facility AL and UPC Facility AK were used to (1) prepay the remaining €190.0 million (\$206.5 million) outstanding principal amount of UPC Facility Y, together with accrued and unpaid interest and the related prepayment premium, (2) prepay the \$1.0 billion outstanding principal amount of UPC Facility Z, together with accrued and unpaid interest and the related prepayment premium, (3) prepay in full the then outstanding €600.0 million (\$652.0 million) amount under UPC Facility AI and (4) prepay 10% of the outstanding principal amount of each of UPC Facility AC and UPC Facility AD, each together with accrued and unpaid interest and the related prepayment premium. The UPCB Finance entities that received the forgoing prepayments used the proceeds therefrom to redeem in full or in part the outstanding principal amount of their respective senior secured notes.

For a further description of the terms of the above financings and certain other transactions affecting our consolidated debt in 2015, see note 10 to our consolidated financial statements included in Part II of this Annual Report on Form 10-K.

## **Equity Transactions**

• Share Repurchases. Pursuant to our share repurchase program, during 2015, we repurchased a total of 49,984,562 Liberty Global Class C ordinary shares and Old Liberty Global Class C ordinary shares at a weighted average price of \$46.91 per share, for an aggregate cash purchase price of \$2,344.5 million, including direct acquisition costs and the effects of derivative instruments. The timing of the repurchase of shares pursuant to this program is dependent on a variety of factors, including market conditions. As of December 31, 2015, the remaining amount authorized for share repurchases was \$1,601.1 million. Subsequent to December 31, 2015, our board of directors increased this amount to \$4.0 billion.

For a further description of our share repurchases, see note 12 to our consolidated financial statements included in Part II of this Annual Report on Form 10-K.

\* \* \* \*

Certain statements in this Annual Report on Form 10-K constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. To the extent that statements in this Annual Report are not recitations of historical fact, such statements constitute forward-looking statements, which, by definition, involve risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements. In particular, statements under Item 1. *Business*, Item 1A. *Risk Factors*, Item 2. *Properties*, Item 7. *Management's Discussion and Analysis of Financial Condition and* 

Results of Operations and Item 7A. Quantitative and Qualitative Disclosures About Market Risk may contain forward-looking statements, including statements regarding our business, product, foreign currency and finance strategies in 2016, our property and equipment additions in 2016 and beyond, subscriber growth and retention rates, competitive, regulatory and economic factors, the timing and impacts of proposed transactions, the maturity of our markets, the anticipated impacts of new legislation (or changes to existing rules and regulations), anticipated changes in our revenue, costs or growth rates, our liquidity, credit risks, foreign currency risks, target leverage levels, our future projected contractual commitments and cash flows and other information and statements that are not historical fact. Where, in any forward-looking statement, we express an expectation or belief as to future results or events, such expectation or belief is expressed in good faith and believed to have a reasonable basis, but there can be no assurance that the expectation or belief will result or be achieved or accomplished. In evaluating these statements, you should consider the risks and uncertainties discussed under Item 1A. Risk Factors and Item 7A. Quantitative and Qualitative Disclosures About Market Risk, as well as the following list of some but not all of the factors that could cause actual results or events to differ materially from anticipated results or events:

- economic and business conditions and industry trends in the countries in which we operate;
- the competitive environment in the industries in the countries in which we operate, including competitor responses to our products and services;
- fluctuations in currency exchange rates and interest rates;
- instability in global financial markets, including sovereign debt issues and related fiscal reforms;
- · consumer disposable income and spending levels, including the availability and amount of individual consumer debt;
- changes in consumer television viewing preferences and habits;
- consumer acceptance of our existing service offerings, including our digital video, broadband internet, fixed-line
  telephony, mobile and business service offerings, and of new technology, programming alternatives and other products
  and services that we may offer in the future;
- our ability to manage rapid technological changes;
- our ability to maintain or increase the number of subscriptions to our digital video, broadband internet, fixed-line telephony and mobile service offerings and our average revenue per household;
- our ability to provide satisfactory customer service, including support for new and evolving products and services;
- our ability to maintain or increase rates to our subscribers or to pass through increased costs to our subscribers;
- our ability to maintain our revenue from channel carriage arrangements, particularly in Germany;
- the impact of our future financial performance, or market conditions generally, on the availability, terms and deployment of capital;
- changes in, or failure or inability to comply with, government regulations in the countries in which we operate and adverse outcomes from regulatory proceedings;
- government intervention that opens our broadband distribution networks to competitors, such as the obligations imposed in Belgium;
- our ability to obtain regulatory approval and satisfy other conditions necessary to close acquisitions and dispositions and the impact of conditions imposed by competition and other regulatory authorities in connection with acquisitions, including the impact of the conditions imposed in connection with the acquisition of Ziggo N.V. (**Ziggo**) on our operations in the Netherlands;
- our ability to successfully acquire new businesses and, if acquired, to integrate, realize anticipated efficiencies from, and implement our business plan with respect to, the businesses we have acquired, such as Ziggo, Choice and BASE, or may acquire, such as CWC;
- changes in laws or treaties relating to taxation, or the interpretation thereof, in the U.K., U.S. or in other countries in which we operate;

- changes in laws and government regulations that may impact the availability and cost of capital and the derivative instruments that hedge certain of our financial risks;
- the ability of suppliers and vendors (including our third-party wireless network providers under our mobile virtual network operator (MVNO) arrangements) to timely deliver quality products, equipment, software, services and access;
- the availability of attractive programming for our digital video services and the costs associated with such programming, including retransmission and copyright fees payable to public and private broadcasters;
- uncertainties inherent in the development and integration of new business lines and business strategies;
- our ability to adequately forecast and plan future network requirements, including the costs and benefits associated with the planned Network Extensions (defined below under *Narrative Description of Business—Business Description—Overview*;
- the availability of capital for the acquisition and/or development of telecommunications networks and services;
- problems we may discover post-closing with the operations, including the internal controls and financial reporting process, of businesses we acquire;
- the leakage of sensitive customer data;
- the outcome of any pending or threatened litigation;
- the loss of key employees and the availability of qualified personnel;
- changes in the nature of key strategic relationships with partners and joint venturers;
- our equity capital structure; and
- events that are outside of our control, such as political unrest in international markets, terrorist attacks, malicious human acts, natural disasters, pandemics and other similar events.

The broadband distribution and mobile service industries are changing rapidly and, therefore, the forward-looking statements of expectations, plans and intent in this Annual Report are subject to a significant degree of risk. These forward-looking statements and the above-described risks, uncertainties and other factors speak only as of the date of this Annual Report, and we expressly disclaim any obligation or undertaking to disseminate any updates or revisions to any forward-looking statement contained herein, to reflect any change in our expectations with regard thereto, or any other change in events, conditions or circumstances on which any such statement is based. Readers are cautioned not to place undue reliance on any forward-looking statement.

#### Financial Information About Operating Segments

Financial information about our reportable segments appears in note 18 to our consolidated financial statements included in Part II of this Annual Report on Form 10-K.

#### **Narrative Description of Business**

#### **Broadband Distribution**

Overview

We offer a variety of broadband services over our cable distribution systems, including video, broadband internet and fixed-line telephony and, in certain of our operations, we offer mobile services. We design these services to enable our customers to access the digital world on their own terms and at their own pace. In most of our footprint, the core of our offer to customers is "triple-play", which we use to describe bundled services of digital video, internet and fixed-line telephony in one subscription. We are enhancing this offer by expanding our services to include mobile in most of our markets. Available service offerings depend on the bandwidth capacity of a particular system and whether it has been upgraded for two-way communications. In select markets, we also offer video services through DTH or through multichannel multipoint (microwave) distribution systems (MMDS). Our consumer brands include Virgin Media, Ziggo, Unitymedia, Telenet, UPC Cablecom, UPC, VTR and in Puerto Rico, Liberty. In 2016, we will use solely the UPC brand in Switzerland, discontinuing the UPC Cablecom brand. In terms of video subscribers, we operate the largest cable network in each of Austria, Belgium, Chile, the Czech Republic, Hungary, Ireland, the Netherlands, Poland, Puerto Rico, Slovakia, Switzerland and the U.K. and the second largest cable network in each of Germany and Romania.

During 2015, we launched a comprehensive plan, which we call the Liberty 3.0 program, to drive our top-line growth while maintaining tight cost controls. The Liberty 3.0 program seeks to capitalize on revenue opportunities associated with Network Extensions (as defined below), mobile and business services, together with the realization of greater efficiencies by leveraging our scale more effectively. Underpinning this program is a commitment to customer centricity, which we believe is key to succeeding in an ever more demanding consumer market. We expect the transformation to occur over the next several years and, as with any program of this magnitude, the benefits are expected to materialize over time. "Network Extensions" refers to network extension programs pursuant to which we will connect additional homes and businesses to our broadband communications network in the U.K., Central and Eastern Europe, Germany, Chile and certain other markets. See Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Overview.

The following table presents certain operating data as of December 31, 2015, with respect to the cable, DTH and MMDS systems of our subsidiaries in Europe, Chile and Puerto Rico. This table reflects 100% of the operational data applicable to each subsidiary regardless of our ownership percentage.

Consolidated Operating Data at December 31, 2015

							Video				
	Homes Passed (1)	Two-way Homes Passed (2)	Customer Relationships (3)	Total RGUs (4)	Basic Video Subscribers (5)	Enhanced Video Subscribers (6)	DTH Subscribers (7)	MMDS Subscribers (8)	Total Video	Internet Subscribers (9)	Fixed-line Telephony Subscribers (10)
Liberty Global Group:											
United Kingdom	12,908,500	12,891,300	5,115,200	12,732,400	[	3,727,000	1	1	3,727,000	4,694,900	4,310,500
Germany	12,763,800	12,556,500	7,144,700	12,518,700	5,003,800	1,497,100	I	I	6,500,900	3,106,200	2,911,600
The Netherlands (11)	7,023,200	7,009,100	4,090,400	9,728,200	768,000	3,320,500			4,088,500	3,101,400	2,538,300
Belgium	2,935,700	2,935,700	2,177,500	4,846,300	340,600	1,714,200			2,054,800	1,570,500	1,221,000
Switzerland (11)	2,195,100	2,194,600	1,351,400	2,567,200	619,600	682,700			1,302,300	759,900	505,000
Austria	1,372,300	1,372,300	654,600	1,378,600	139,200	363,300			502,500	484,800	391,300
Ireland	856,500	772,000	497,400	1,094,800	32,100	311,200		22,200	365,500	371,200	358,100
Total Western Europe	40,055,100	39,731,500	21,031,200	44,866,200	6,903,300	11,616,000		22,200	18,541,500	14,088,900	12,235,800
Poland	2,971,300	2,903,000	1,441,600	2,847,700	240,700	962,200			1,202,900	1,052,400	592,400
Hungary	1,624,100	1,606,800	1,094,500	2,061,100	170,100	478,600	289,400		938,100	588,200	534,800
Romania	2,647,600	2,579,800	1,243,300	2,127,500	290,600	593,200	350,600		1,234,400	488,800	404,300
Czech Republic	1,421,800	1,388,500	720,300	1,206,600	107,300	361,400	120,100		588,800	456,500	161,300
Slovakia	540,000	517,500	276,700	442,900	36,500	144,100	69,300	200	250,400	123,500	000,69
Total Central and Eastern Europe	9,204,800	8,995,600	4,776,400	8,685,800	845,200	2,539,500	829,400	500	4,214,600	2,709,400	1,761,800
Total Liberty Global Group	49,259,900	48,727,100	25,807,600	53,552,000	7,748,500	14,155,500	829,400	22,700	22,756,100	16,798,300	13,997,600
LiLAC Group:											
Chile	3,061,500	2,545,100	1,263,400	2,719,000	93,800	932,200			1,026,000	1,003,100	006,689
Puerto Rico	1,070,700	1,070,700	400,900	776,900		263,900			263,900	319,000	194,000
Total LiLAC Group	4,132,200	3,615,800	1,664,300	3,495,900	93,800	1,196,100			1,289,900	1,322,100	883,900
Grand Total	53,392,100	52,342,900	27,471,900	57,047,900	7,842,300	15,351,600	829,400	22,700	24,046,000	18,120,400	14,881,500

- (1) Homes Passed are homes, residential multiple dwelling units or commercial units that can be connected to our networks without materially extending the distribution plant, except for DTH and MMDS homes. Our Homes Passed counts are based on census data that can change based on either revisions to the data or from new census results. We do not count homes passed for DTH. With respect to MMDS, one MMDS customer is equal to one Home Passed. Due to the fact that we do not own the partner networks (defined below) used in Switzerland and the Netherlands (see note 11 below), we do not report homes passed for Switzerland's and the Netherlands' partner networks.
- (2) Two-way Homes Passed are Homes Passed by those sections of our networks that are technologically capable of providing two-way services, including video, internet and fixed-line telephony services.
- Customer Relationships are the number of customers who receive at least one of our video, internet or fixed-line telephony services that we count as Revenue Generating Units (RGUs), without regard to which or to how many services they subscribe. To the extent that RGU counts include equivalent billing unit (EBU) adjustments, we reflect corresponding adjustments to our Customer Relationship counts. For further information regarding our EBU calculation, see Additional General Notes to Tables below. Customer Relationships generally are counted on a unique premises basis. Accordingly, if an individual receives our services in two premises (e.g., a primary home and a vacation home), that individual generally will count as two Customer Relationships. We exclude mobile-only customers from Customer Relationships.
- (4) Revenue Generating Unit or RGU is separately a Basic Video Subscriber, Enhanced Video Subscriber, DTH Subscriber, MMDS Subscriber, Internet Subscriber or Fixed-line Telephony Subscriber. A home, residential multiple dwelling unit, or commercial unit may contain one or more RGUs. For example, if a residential customer in our Austrian market subscribed to our enhanced video service, fixed-line telephony service and broadband internet service, the customer would constitute three RGUs. Total RGUs is the sum of Basic Video, Enhanced Video, DTH, MMDS, Internet and Fixed-line Telephony Subscribers. RGUs generally are counted on a unique premises basis such that a given premises does not count as more than one RGU for any given service. On the other hand, if an individual receives one of our services in two premises (e.g., a primary home and a vacation home), that individual will count as two RGUs for that service. Each bundled cable, internet or fixed-line telephony service is counted as a separate RGU regardless of the nature of any bundling discount or promotion. Non-paying subscribers are counted as subscribers during their free promotional service period. Some of these subscribers may choose to disconnect after their free service period. Services offered without charge on a long-term basis (e.g., VIP subscribers, free service to employees) generally are not counted as RGUs. We do not include subscriptions to mobile services in our externally reported RGU counts. In this regard, our December 31, 2015 RGU counts exclude our separately reported postpaid and prepaid mobile subscribers.
- (5) Basic Video Subscriber is a home, residential multiple dwelling unit or commercial unit that receives our video service over our broadband network either via an analog video signal or via a digital video signal without subscribing to any recurring monthly service that requires the use of encryption-enabling technology. Encryption-enabling technology includes smart cards, or other integrated or virtual technologies that we use to provide our enhanced service offerings. With the exception of RGUs that we count on an EBU basis, we count RGUs on a unique premises basis. In other words, a subscriber with multiple outlets in one premises is counted as one RGU and a subscriber with two homes and a subscription to our video service at each home is counted as two RGUs. In Europe, we have approximately 133,800 "lifeline" customers that are counted on a per connection basis, representing the least expensive regulated tier of video cable service, with only a few channels.
- (6) Enhanced Video Subscriber is a home, residential multiple dwelling unit or commercial unit that receives our video service over our broadband network or through a partner network via a digital video signal while subscribing to any recurring monthly service that requires the use of encryption-enabling technology. Enhanced Video Subscribers that are not counted on an EBU basis are counted on a unique premises basis. For example, a subscriber with one or more set-top boxes that receives our video service in one premises is generally counted as just one subscriber. An Enhanced Video Subscriber is not counted as a Basic Video Subscriber. As we migrate customers from basic to enhanced video services, we report a decrease in our Basic Video Subscribers equal to the increase in our Enhanced Video Subscribers. Subscribers to enhanced video services provided by our operations in Switzerland and the Netherlands over partner networks receive basic video services from the partner networks as opposed to our operations.
- (7) DTH Subscriber is a home, residential multiple dwelling unit or commercial unit that receives our video programming broadcast directly via a geosynchronous satellite.
- (8) MMDS Subscriber is a home, residential multiple dwelling unit or commercial unit that receives our video programming via MMDS.
- (9) Internet Subscriber is a home, residential multiple dwelling unit or commercial unit that receives internet services over our networks, or that we service through a partner network. Our Internet Subscribers exclude 53,000 digital subscriber line (DSL) subscribers within Austria that are not serviced over our networks. Our Internet Subscribers do not include customers that receive services from dial-up connections. In Switzerland, we offer a 2 Mbps internet service to our Basic and Enhanced Video Subscribers without an incremental recurring fee. Our Internet Subscribers in Switzerland include 100,000 subscribers who have requested and received this service.
- (10) Fixed-line Telephony Subscriber is a home, residential multiple dwelling unit or commercial unit that receives voice services over our networks, or that we service through a partner network. Fixed-line Telephony Subscribers exclude mobile telephony subscribers. Our Fixed-line Telephony Subscribers exclude 41,300 subscribers within Austria that are not serviced over our networks. In Switzerland,

- we offer a basic phone service to our Basic and Enhanced Video Subscribers without an incremental recurring fee. Our Telephony Subscribers in Switzerland include 57,200 subscribers who have requested and received this service.
- Pursuant to service agreements, Switzerland and, to a much lesser extent, the Netherlands offer enhanced video, broadband internet and fixed-line telephony services over networks owned by third-party cable operators (**partner networks**). A partner network RGU is only recognized if there is a direct billing relationship with the customer. At December 31, 2015, Switzerland's partner networks account for 139,500 Customer Relationships, 284,400 RGUs, 104,400 Enhanced Video Subscribers, 106,600 Internet Subscribers and 73,400 Fixed-line Telephony Subscribers.

#### Additional General Notes to Table:

Most of our broadband communications subsidiaries provide fixed-line telephony, broadband internet, data, video or other business services. Certain of our business service revenue is derived from small or home office (**SOHO**) subscribers that pay a premium price to receive enhanced service levels along with video, internet or fixed-line telephony services that are the same or similar to the mass marketed products offered to our residential subscribers. All mass marketed products provided to SOHOs, whether or not accompanied by enhanced service levels and/or premium prices, are included in the respective RGU and customer counts of our broadband communications operations, with only those services provided at premium prices considered to be "SOHO RGUs" or "SOHO customers". With the exception of our business SOHO subscribers, we generally do not count customers of business services as customers or RGUs for external reporting purposes.

Certain of our residential and commercial RGUs are counted on an EBU basis, including residential multiple dwelling units and commercial establishments, such as bars, hotels and hospitals, in Chile and Puerto Rico and certain commercial and residential multiple dwelling units in Europe (with the exception of Germany and Belgium, where we do not count any RGUs on an EBU basis). Our EBUs are generally calculated by dividing the bulk price charged to accounts in an area by the most prevalent price charged to non-bulk residential customers in that market for the comparable tier of service. As such, we may experience variances in our EBU counts solely as a result of changes in rates. In Germany, homes passed reflect the footprint, and two-way homes passed reflect the technological capability of our network up to the street cabinet, with drops from the street cabinet to the building generally added, and in-home wiring generally upgraded, on an as needed or success-based basis. In Belgium, Telenet leases a portion of its network under a long-term capital lease arrangement. These tables include operating statistics for Telenet's owned and leased networks.

While we take appropriate steps to ensure that subscriber statistics are presented on a consistent and accurate basis at any given balance sheet date, the variability from country to country in (1) the nature and pricing of products and services, (2) the distribution platform, (3) billing systems, (4) bad debt collection experience and (5) other factors add complexity to the subscriber counting process. We periodically review our subscriber counting policies and underlying systems to improve the accuracy and consistency of the data reported on a prospective basis. Accordingly, we may from time to time make appropriate adjustments to our subscriber statistics based on those reviews.

Subscriber information for acquired entities is preliminary and subject to adjustment until we have completed our review of such information and determined that it is presented in accordance with our policies.

• Video. Our cable operations offer a full range of video services, including basic and premium programming, an electronic programming guide, high definition (HD) channels, HD receivers, digital video recorders (DVR) and HD DVRs. These services can be viewed on the television and, in most markets, through internet connected devices in the home and whenever there is internet connectivity. In certain markets, our advanced service offerings include video-on-demand (VoD) and advanced next generation set-top boxes like the multimedia home gateway "Horizon TV" or the "TiVo" service offered by Virgin Media in the U.K. or the "Digital TV" service with a Horizon-like user interface offered by Telenet in Belgium. These services, together with DVR and HD DVR functionality, give our customers the ability to control when they watch their programming. In several of our markets, we have enhanced pay-per-view programming on channels we distribute and through VoD. Several of our operations offer television applications (apps) that allow access to programming on a variety of devices, including laptops, smart phones and tablets through our online product, "Horizon Go".

Subscribers access our enhanced video service by renting a set-top box from our operators, or purchasing one and obtaining a conditional access security card, or a "**smart card**", from our operators, or without a set-top box if a subscriber is only using our basic video service. Neither a set-top box nor a smart card is required to receive basic digital television channels in our unencrypted footprints. In some of our markets, instead of a set-top box, a subscriber may use a common interface plus (**CI+**) module in combination with a smart card to access our enhanced video services. A CI+ module is a small device (credit card size) that allows customers with a CI+ enabled television set, who subscribe to, or otherwise have access to, our enhanced video service, to view such services without a set-top box. No set-top box, smart card or CI+ module is, however, required to receive our unencrypted basic digital services. Accordingly, subscribers with the necessary equipment and who pay a monthly subscription fee for our analog package are able to also receive our basic digital services. In addition, expanded channel packages and premium channels and services are available for an incremental monthly fee in all of our markets.

Our cable operations offer multiple tiers of digital video programming and audio services starting with a basic video service. Subscribers to our basic video service pay a fixed monthly fee and generally receive at least 60 digital or analog video channels (including a limited number of HD channels) and several digital and analog radio channels. This service also includes VoD access and an electronic programming guide. In our markets where our basic digital service is unencrypted, the cost of our digital service is the same cost as the monthly fee of our analog service. In the markets where we encrypt our basic digital service, our digital service is generally offered at an incremental cost equal to or slightly higher than the monthly fee for our basic analog service. We tailor our video services in each country of operation based on programming preferences, culture, demographics and local regulatory requirements. Our channel offerings include general entertainment, sports, movies, documentaries, lifestyles, news, adult, children and ethnic and foreign channels. We also offer a variety of premium channel packages to meet the special interests of our subscribers.

For an additional monthly charge, a subscriber may upgrade to one of our extended digital tier services and receive an increased number of video and radio channels, including the channels in the basic tier service and additional HD channels. Digital subscribers may also subscribe to one or more packages of premium channels for an additional monthly charge. For subscribers who want access to thousands of movies and TV series, we offer subscription VoD services, including our subscription VoD service "MyPrime". MyPrime is available for an additional fee with our basic video services and is included in our enhanced video services with our Horizon TV platform (described below). MyPrime offers customers unlimited streaming access to a library of on-demand content both through our set-top boxes and through the Horizon Go platform. Each library has been tailored to the specific market based on available content, consumer preferences and competitive offers. Generally, a library consists of approximately 20% movies, 55% TV episodes and 25% children episodes. The content is from local and international suppliers, such as ABC/Disney, A+E Networks, NBC/Universal, CBS/Paramount, BBC, Warner TV and Sony.

In the Netherlands, Germany, Switzerland, Ireland, Poland and the Czech Republic, a subscriber to our enhanced video services also has the option for an incremental monthly charge to upgrade the standard digital set-top box to a Horizon TV box (which has HD DVR capabilities and other additional features). These boxes may be rented from us. In all our operations, except Romania and Slovakia, VoD services, including catch-up TV, are available on a subscription basis or a transaction basis, depending on the tier of enhanced video service selected by the subscriber. Customers who subscribe to an extended digital tier generally receive a VoD enabled set-top box without an additional monthly charge. The subscription-based VoD service includes various programming, such as music, kids, documentaries, adult, sports or series and a limited amount of 3D programming.

In addition to our digital video services, we offer limited analog services in all of our broadband markets, except in the U.K., Switzerland and Puerto Rico. Subscribers to our analog video service typically receive 21 to 67 channels of video service, depending on their location. Subscribers to our digital services also receive the channels available through our analog service. In Ireland and Slovakia, we offer a limited number of video channels through MMDS. In all of our broadband operations, we continue to upgrade our systems to expand our digital services and encourage our analog subscribers to convert to a digital or premium digital service.

Discounts to our monthly service fees are available to any subscriber who selects a bundle of two or more of our services (**bundled services**): video, internet, fixed-line telephony and, in certain markets, mobile services. Bundled services consist of "double-play" for two services, "triple-play" for three services and "quadruple-play" for four services.

We offer digital video services through DTH satellite in the Czech Republic, Hungary, Romania and Slovakia. We offer these services through UPC DTH S.á.r.l (UPC DTH), a subsidiary of UPC Holding organized in Luxembourg, which also has a management arrangement with another subsidiary, FocusSat Romania Srl (FocusSat), to provide these services in Romania. Similar to our video cable services, we offer a basic video tier of service and, for an additional monthly charge, subscribers may upgrade to an extended tier of service and may subscribe to various premium channel packages.

• Interactive Services. To enhance our customers video experience, we offer Horizon TV in the Netherlands, Germany, Switzerland, Ireland, Poland and the Czech Republic. Horizon TV is a next generation multimedia home gateway decoder box based on a digital television-platform that is capable of distributing video, voice and data content throughout the home and to multiple devices. It has a sophisticated user interface that enables customers to view and share, across multiple devices, linear channels, VoD programming and personal media content and to pause, replay and record programming. The Horizon TV platform can act as an internet router that allows access through the gateway box to the digital video content available on the television via other devices, such as laptops, smart phones and tablets. It also integrates access to personal media content, such as photos, music and movies stored in the home network.

For our multimedia gateway customers, we also offer various features and functionalities. We intend to (1) expand the availability of Horizon TV to other markets within our footprint and (2) continue to improve the Horizon TV user experience with new functionality and software updates. In 2015, we launched our new "**Replay TV**" service in the Netherlands and Ireland and expanded this service in Switzerland. This service allows our customers to go back seven days in the electronic programming guide to "replay" linear programming they have missed. Using the Horizon Go app, customers can watch programs from the past seven days on their laptops, smart phones or tablets. Replay TV is also available to our Digital TV customers in Belgium. We expect to expand the availability of Replay TV to additional markets during 2016.

For our Horizon TV subscribers, we offer apps for various online services (such as YouTube, Picasa and others). The Horizon family of products also includes an online television app for viewing on a second screen called Horizon Go that allows video customers to view linear channels, with many channels available outside of the home. Horizon Go also offers access to VoD and, for Horizon TV customers, when in the home, the second screen devices also act as a remote control. Subscription VoD, such as MyPrime and, in Germany, Maxdome, is also available via the Horizon Go service. We also have available through Horizon Go the ability to remotely schedule the recording of a television program on the Horizon TV box at home through an iOS or Android mobile digital device or an internet web browser.

At December 31, 2015, we had 1,759,000 Horizon TV subscribers, excluding 174,000 subscribers in the Czech Republic where we have upgraded their set-top box to provide Horizon TV services. The Horizon TV cloud platform allows users to stream experiences to set-top boxes. This cloud-based Horizon TV platform is available in the Czech Republic and in Poland. Digital video experiences are offered by us through the TiVo platform in the U.K. under a strategic partnership agreement with TiVo Inc. The TiVo boxes provide converged television and broadband internet capabilities. The digital platform, Digital TV, is also available to our enhanced video subscribers in Belgium, which has been upgraded with a new Horizon-like user interface and improved functionalities. At December 31, 2015, we had 2,897,000 TiVo subscribers and 1,714,000 subscribers to Telenet's Digital TV.

In addition, we offer our regular interactive DVR and, as described above, MyPrime. Where the Horizon TV platform service is not available, MyPrime is offered as a premium channel for non-Horizon TV subscribers. We have launched MyPrime in the Netherlands, Switzerland, Ireland, Poland, Hungary, the Czech Republic and Slovakia.

Broadband Internet. We offer multiple tiers of broadband internet service in all of our broadband communications
markets. Depending on location, this service includes download speeds ranging from less than 1 Mbps to an ultra highspeed internet service of 500 Mbps in Switzerland, Hungary, Romania and Slovakia. In general, our most economically
priced tier has download speeds of either 100 Mbps or 150 Mbps. Our ultra high-speed internet service is based primarily

on Euro DOCSIS 3.0 technology, which is an international standard that defines the requirements for data transmission over a cable system. Euro DOCSIS can deliver speeds of up to 1 Gbps. We are currently testing Euro DOCSIS 3.1 and expect to begin commercial deployment of that system in late 2016.

Our internet service generally includes email, address book and parental controls. We also offer value-added broadband services through certain of our operations for an incremental charge. These services include security (e.g., anti-virus, anti-spyware, firewall and spam protection) and online storage solutions and web spaces. In certain of our markets, we offer mobile broadband services as described under —*Mobile* below.

Our residential subscribers generally access the internet via cable modems connected to their internet capable devices, including personal computers, at various speeds depending on the tier of service selected. This standard means of access is changing as we expand our services to offer wireless networks for the home, such as Horizon TV. In certain of our markets, we are deploying a community WiFi via routers in the home (the **Community WiFi**), which provides a secure access to the internet for our customers. Community WiFi is enabled by a cable modem WiFi access point (**WiFi modem**) in the set-top box or the Horizon TV box of our internet customers. The Community WiFi is created through the sharing of access to the public channel of our customers' home wireless routers. The public channel is a separate network from the secure private network used by the customer within the home and is automatically enabled when the WiFi modem is installed. Access is free for our internet customers.

At December 31, 2015, we had almost 6.1 million WiFi access points in our European footprint and we plan to increase our WiFi access points to over 10.0 million in 2016. In the U.K., Virgin Media's customers have access to an extensive network of public WiFi access points, including in the London underground train stations. Public WiFi access points are also available to Unitymedia customers in Germany and Telenet customers in Belgium. We plan to expand our Community WiFi service in 2016. Our Community WiFi is branded as "Wi-Free" in Austria, Belgium, Switzerland, Ireland, Czech Republic, Poland, Hungry and Romania and as "WifiSpots" in the Netherlands. Through an agreement with Comcast Corporation, in 2016 our internet customers will also have access to millions of WiFi access points in the U.S. and across various European countries for no additional costs.

We have introduced a next generation WiFi and telephony gateway in the U.K., Germany, Belgium, Switzerland and Romania. This gateway includes both a data modem and a WiFi router and will permit download speed of up to 1 Gpbs across our existing Euro DOCSIS 3.0 platform and is expected to support Euro DOCSIS 3.1. It has an automatic WiFi optimization function, which selects the best possible wireless frequency at any given time. This gateway can be self-installed and allows customers to customize their home WiFi service. It will be introduced in the rest of our operations in 2016. By using the WiFi modems, the Horizon TV box and the new gateway, the Community WiFi does not affect the internet speeds of our customers.

In the Netherlands and Romania, a subscriber must subscribe to our video service (or the video service in a partner network) in order to subscribe to our internet service. In our other markets, our broadband internet service is available on a standalone basis or in combination with one or more of our other services. Subscribers to our internet service pay a monthly fee based on the tier of service selected. In addition to the monthly fee, customers pay an activation service fee upon subscribing to an internet service. This one-time fee may be waived for promotional reasons. We determine pricing for each different tier of internet service through an analysis of speed, market conditions and other factors.

• Telephony. Multi-feature fixed-line telephony services are available through our managed, quality of service based voice-over-internet-protocol (VoIP) technology in all of our broadband communication markets. In the U.K., Chile and Hungary, we also provide traditional circuit-switched fixed-line telephony services. We pay interconnection fees to other telephony and internet providers when calls by our subscribers terminate on another network and receive similar fees from providers when calls by their users terminate on our network through interconnection points.

Our fixed-line telephony service may be selected in several of our markets on a standalone basis and in all of our markets in combination with one or more of our other services. Our fixed-line telephony service includes a basic fixed-line telephony product for line rental and various calling plans, which may consist of any of the following: unlimited network, national or international calling, unlimited off-peak calling and minute packages, including calls to fixed and mobile phones. We also offer value added services, such as a personal call manager, unified messaging and a second or third phone line at an incremental cost. In some of our markets, we offer a phone app that allows our fixed-line telephony customers with smart phones to use their fixed-line call packages.

• *Mobile*. We offer mobile services, both data and voice, as an MVNO over third-party networks in the U.K., Germany, the Netherlands, Belgium, Switzerland, Austria, Ireland, Hungary and Chile. In Poland, we have a small legacy MVNO service that we maintain for those subscribers. In the Netherlands, Switzerland and Chile, our mobile services are provided

through LTE wireless systems. We plan to add MVNO arrangements in certain of our other broadband communication markets. The Netherlands, Belgium, Switzerland, Austria, Ireland, Hungary and Chile provide their mobile telephony services as full MVNOs through partnerships with a third-party mobile network operator in their respective footprints. All of these operations lease the third party's radio access network and own the core network, including switching, backbone, interconnections, etc. For certain portions of our mobile customer base in the Netherlands, we outsource the core network to a third party. These arrangements permit us to offer our customers in these markets all mobile services without having to build and operate a cellular radio tower network. Following the February 2016 acquisition of BASE, Telenet became a network provider in Belgium and plans to migrate its current and future mobile subscribers to the BASE network after termination of its MVNO agreement at the end of 2017.

In the U.K. and Germany, we provide mobile telephony as light MVNOs. In these countries, we lease the core network as well as the radio access network from a mobile network operator. These arrangements permit our customers in these countries to have access to the third party mobile communications services while we maintain the customer relationship. We offer our mobile services throughout the U.K., Belgium, Switzerland, Austria, Ireland, Hungary and Chile. In the Netherlands and Germany, we offer our mobile service to our customers located within our footprints who subscribe to at least one of our other products: video, broadband internet or fixed-line telephony. At December 31, 2015, we had approximately 4.8 million mobile subscribers.

Where mobile services are available within our operations, subscribers pay varying monthly fees depending on whether the mobile service is included with our fixed-line telephony service or includes mobile data services via mobile phones, tablets or laptops. We offer our customers the option to purchase mobile handsets and, in the U.K., Belgium and Switzerland, make such purchase pursuant to a contract independent of their mobile services contract. Where the new WiFi gateway described above is available, telephony customers can use a special phone app to take and make calls anywhere at home rates. Versions of this app have been available to our customers in the U.K., the Netherlands, Belgium, Switzerland and Ireland for some time.

We typically charge a one-time activation fee to our customers for each subscriber identification module (SIM) card. Our mobile services typically include voice, short message service (or SMS) and internet access. Calls, both within and out of network, incur a charge or are covered under a postpaid monthly service plan. Our mobile services are primarily on a postpaid basis with customers subscribing to services for periods ranging from activation for a SIM-only contract to up to 24 months, with the latter often taken with a subsidized mobile handset. In Belgium, however, our postpaid service is offered without a minimum contract term. In the U.K., we also offer a prepaid service, where the customers pay in advance for a pre-determined amount of airtime or data and generally have no minimum contract term. In almost all of our markets, subscribers to a double-or triple-play bundle receive a discount on their mobile service fee.

#### **Business Services**

In addition to our residential services, we offer a range of voice, broadband internet, data, video, wireless and cloud services to business customers and public sector organizations. These services differ from residential services in several fundamental ways, such as bandwidth, service levels, billing, security services and the blending of public and private network features. Our business customers include SOHO (generally up to five employees), small business and medium and large enterprises, as well as on a wholesale basis to other operators. Our business services are designed to meet the specific demands of our business customers with a wide range of services, including increased data transmission speeds and virtual private networks. These services fall into five broad categories: (1) VoIP and circuit-switch telephony, hosted private branch exchange solutions and conferencing options, (2) data services for internet access, virtual private networks Ethernet transport and high capacity point-to-point services, (3) video programming packages and select channel lineups for targeted industries, (4) wireless services for mobile voice and data, as well as WiFi networks and (5) value added services, including webhosting, managed security systems and storage and cloud enabled software.

Our business services are provided to customers at contractually established prices based on the size of the business, type of services received and the volume and duration of the service agreement. SOHO and small business customers pay business market prices on a monthly subscription basis to receive enhanced service levels and business features that support their needs. For more advanced business services, these customers generally enter into a service agreement. For medium to large business customers, we enter into individual agreements that address their needs. These agreements are generally for a period of one or more years. In addition to providing business services over our networks, certain of our operations also have agreements to provide these services to our business customers over dedicated fiber lines and third party fiber networks.

#### **Technology**

In almost all of our markets, our video, broadband internet and fixed-line telephony services are transmitted over a hybrid fiber coaxial cable network. This network is composed primarily of national and regional fiber networks, which are connected to the home over the last few hundred meters by coaxial cable. Approximately 98% of our network allows for two-way communications and is flexible enough to support our current services, as well as new services. In addition, the capacity available on our network increases as our analog subscribers switch to a digital service. This is because multiple digital channels can be compressed into the same space as a single analog channel in the broadcast spectrum. The available space can then be used for other purposes, such as VoD services and high broadband speeds.

We closely monitor our network capacity and customer usage. Where necessary, we increase our capacity incrementally, for instance by splitting nodes in our network. We also continue to explore new technologies that will enhance our customer's connected entertainment experience, such as:

- recapturing bandwidth and optimizing our networks by:
  - increasing the number of nodes in our markets and using digital compression technologies;
  - increasing the bandwidth of our hybrid fiber coaxial cable network to 1 GHz;
  - converting analog channels;
  - bonding additional Euro DOCSIS 3.0 channels; and
  - using digital compression technologies;
- increasing the efficiency of our networks by moving headend functions (encoding, transcoding and multiplexing) to the cloud;
- enhancing our network to accommodate business services;
- using wireless technologies to extend our services outside the home;
- offering remote access to our video services through laptops, smart phones and tablets; and
- expanding the availability of Horizon TV and related products and developing and introducing online media sharing and streaming or cloud based video.

In addition, we are expanding our hybrid fiber coaxial cable network into new market areas. For example, beginning in 2015, we commenced a Network Extension program in the U.K. and we plan to pursue similar opportunities in Germany, Central and Eastern Europe and Chile. See Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations*—*Overview*.

We are also testing Euro DOCSIS 3.1 and expect to begin commercial deployment of that system in late 2016.

We deliver our high-speed data and fixed-line telephony over our cable network. The cable networks of our operations are connected to our "aorta" backbone, a tier 1 carrier, that permits us to serve our customers through settlement free collaboration with other carriers without the cost of using a third-party network.

### Supply Sources

For our video services, we license almost all of our programming and on-demand offerings from content providers and third-party rights holders, including broadcasters and cable programming networks. For such licenses, we generally pay a monthly fee on a per channel or per subscriber basis, with minimum pay guarantees in certain cases. We generally enter into long-term programming licenses with volume discounts and marketing support. For on-demand programming and streaming services, we generally enter into shorter-term agreements. For our distribution agreements, we seek to include the rights to offer the licensed programming to our customers through multiple delivery platforms and through our apps for smart phones and tablets.

We purchase each type of customer premises equipment from a number of different suppliers with at least two or more suppliers for our high-volume products. Customer premises equipment includes set-top boxes, modems, CI+ modules, DVRs, tuners and similar devices. For each type of equipment, we retain specialists to provide customer support. For our broadband services, we use a variety of suppliers for our network equipment and the various services we offer. Similarly, we use a variety of suppliers for mobile handsets to offer customers in our operations with mobile services. For our mobile services, we are dependent on the

MVNO arrangements we have entered into with third-party wireless network providers that offers mobile services to carry our mobile communications traffic. Each of our operations offering mobile services has an agreement with a provider for its customers. In each case, we seek to enter into medium to long-term arrangements for these services.

We license software products, including email and security software, and content, such as news feeds, from several suppliers for our internet services. The agreements for these products require us to pay a per subscriber fee for software licenses and a share of advertising revenue for content licenses. For our TiVo service in the U.K., we have a partnership arrangement where TiVo is the exclusive provider of the user interface software for our next generation set-top boxes, which provide converged television and broadband internet capabilities, and we are the exclusive distributor of the TiVo services and technology in the U.K. For our fixed-line telephony services, we license software products, such as voicemail, text messaging and caller ID, from a variety of suppliers. For these licenses we seek to enter into long-term contracts, which generally require us to pay based on usage of the services.

The following table presents certain penetration and network data as of December 31, 2015, with respect to the cable systems of our consolidated subsidiaries attributed to the LiLAC Group. The table reflects 100% of the data applicable to each of our subsidiaries regardless of our ownership percentage. Percentages are rounded to the nearest whole number.

Network & Product Penetration Data (%) at December 31, 2015

Slovakia Chile Rico	06 83 100	8 8	88 83 100	88 83 100	97 77 34	10 33	3 13 33		33 34 25	80 91 100	49 61 66		24 39 30	39	39	36 27 24
Romania	0	97	76	96	96	1	4		33	29	32		19	19	16 16	19 16 13
Czech Republic	80	86	86	86	66	(10)	П		33	77	99	,	33	33	33	33 12 40
Hungary	00	86	66	66	26	53	20		40	74	4	37	ò	33	33 2	33
Poland	ŏ	86	86	86	66	(10)	(10)		40	80	26	36		20	20	20
Ireland	O	97	06	68	57	34	∞		40	91	06	48		46	46	46
Austria	100	95	95	95	98	1	14		37	72	85	35		29	29	29
Switzerland	9	$100^{(9)}$	$100^{(9)}$	$100^{(9)}$	100	;	ŀ		59	52	68	35		23	23	23
Belgium	100	100	100	100	21	ł	62		70	83	26	53	9	42	24 6	24 22 22 23
The Netherlands	100		100	100	100	ŀ	ŀ		58	81	4	44	70	20	20	30
Germany	ŏ	$\frac{100^{(9)}}{100^{(9)}}$	(6)86	(6)86	86	ł	2		51	23	89	25	23	67	57 - 1	10
U.K.	100	100	100	100	13	92	11		29	100	91	36	23	C		19
	Liberty Global Network Data: Two-way homes passed	(Tr) percentage (1) Digital video availability percentage (2)	Broadband internet availability percentage (2)	Fixed-line telephony availability percentage (2)	Bandwidth percentage (3): at least 860 MHz	750 MHz to 859 MHz	less than 750 MHz	Liberty Global Product Penetration:	Cable television penetration (4)	Enhanced Video penetration (5)	HD, DVR & HD DVR penetration (6)	Broadband internet penetration (7)	Fixed telephony nenetration (7)	beneather (')	Double-play	Double-play penetration (8)

- (1) Percentage of total HP that are two-way HP.
- (2) Percentage of total HP to which digital video (including digital MMDS), broadband internet or fixed telephony services, as applicable, are made available.
- (3) Percentage of total HP served by a network with the indicated bandwidth. HP for Ireland excludes MMDS HP.
- (4) Percentage of total HP that subscribe to cable television services (Basic Video or Enhanced Video).
- (5) Percentage of cable television subscribers (Basic Video and Enhanced Video Subscribers) that are Enhanced Video Subscribers.
- (6) Percentage of Enhanced Video Subscribers with HD, DVR or HD DVR. This Percentage would not include subscribers who may use a purchased set-top box or other means to receive our basic digital cable channels without subscribing to any services that would require the payment of recurring monthly fees in addition to the basic analog service fee due to the fact that our basic digital cable channels are not encrypted in certain portions of our footprint.
- (7) Percentage of two-way HP that subscribe to broadband internet or fixed-line telephony services, as applicable.
- (8) Percentage of total customers that subscribe to two services (**double-play** customers) or three services (**triple-play** customers) offered by our operations (video, broadband internet and fixed-line telephony).
- (9) Assuming the contractual right to serve the building exists in the case of multiple dwelling units.
- (10) Less than 1%.

The following table provides information on the products and services available to our cable customers as of December 31, 2015. Percentages are rounded to the nearest whole number.

Video, Broadband Internet & Fixed-Line Telephony and Mobile Services at December 31, 2015

	U.K.	Germany	The Netherlands	Belgium	Switzerland	Austria	Ireland	Poland	Hungary	Czech Republic	Romania	Slovakia	Chile	Puerto Rico
Video services (excluding DTH):  Number of Next Generation		!	i							;				
Video (1) (m 000's)	2,897 X	460 X	706 X	1,714 X	295 X	×	149 X	128 X	×	70 ×	×	×		
Number of out-of-home channels available	134	88	95	98	178		77	81	63	80				
Replay TV			×	×	×		×							
VoD	×	×	×	×	×	×	×	×	×	×			×	×
DVR	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Number of channels in basic digital tier	61	88	74	75	06	107	63	103	92	104	115	109	98	103
Number of channels in basic analog tier (3)	n/a	29	30	21	n/a	30	26	$32 \text{ or } 42^{(9)}$	28	41	41	45	29	n/a
Number of unique channels in basic digital tier (4)	61	65	44	54	06	72	37	61 or $71^{(9)}$	58	85	74	49	19	103
Number of HD channels	49	$78 \text{ or } 79^{(6)}$	55	15	130	55	41	78	25	44	39	31	62	103
Broadband internet service:  Maximum download speed  offered (Mbps)	200	$200^{(7)}$	$200^{(7)}$	$200^{(7)}$	500	250	240	$250^{(10)}$	500	300	500	500	120	200
Percentage of Two-way Homes Passed with 3.0 speeds of at least 100														
Mbps	100	100	100	100	100	100	86	100	93	100	100	100	100	100
Fixed-line telephony and mobile services:														
Volp Fixed-line	(8)	×	×	×	×	×	×	×	×	×	×	×	×	×
SIM cards (in $000^{(5)}$ )	3,016	356	187	1,001	33	13	∞	7(11)	34				132	

- (1) Available on the Horizon TV platform, except in the U.K. where these services are available through the TiVo platform and in Belgium where these services are available through the Digital TV platform.
- (2) Via Horizon Go platform, except TV Anywhere in the U.K. and the Yelo Play app in Belgium.
- (3) Excludes the lifeline tier.
- (4) Excludes the channels that are also included in basic analog tier.
- (5) Represents the number of active SIM cards in service.
- (6) Depending on whether the subscriber is located in Baden-Württemberg, North Rhine-Westphalia or Hesse.
- (7) Speeds of up to 250 Mbps, 500 Mbps and 240 Mbps are available to business customers in Germany, the Netherlands and Belgium, respectively.
- (8) Available to business customers only.
- (9) Depending on location.
- (10) Speeds of up to 600 Mbps available in limited areas.
- (11) Limited to legacy subscribers.

Operations—Liberty Global Group

Provided below is country-specific information with respect to the broadband communications and DTH services of our subsidiaries attributed to the Liberty Global Group.

• Virgin Media. Virgin Media operates a cable network in the U.K. and Ireland under the Virgin Media brand. Virgin Media also operates an MMDS network in Ireland, the license for which will expire in April 2016. Virgin Media's video services include a broad range of digital interactive services, including VoD, and a range of premium subscription-based and payper-view services. Virgin Media offers triple-play services consisting of video, internet and fixed-line telephony in parts of many metropolitan areas in England, Wales, Scotland and Northern Ireland and in five regional clusters in Ireland, including the capital city of Dublin and other major cities. Virgin Media also offers quadruple-play services that include mobile voice and data services as an MVNO through an arrangement with mobile communications providers. In addition, Virgin Media offers its customers access to an extensive network of public WiFi hotspots, including in the London underground train (or Tube) stations in the U.K.

<u>U.K.</u> As a complement to its broadband services, Virgin Media-U.K. offers a comprehensive internet streaming video service, Virgin TV Anywhere, that allows its video customers to stream up to 117 real-time video channels and watch VoD content anywhere in the U.K. where they have a broadband connection. The streaming service is available at no additional cost to Virgin Media-U.K.'s digital video customers. In addition, Virgin Media-U.K. offers the multimedia home gateway TiVo to its digital video customers. Customers can record up to three programs simultaneously when watching an existing recording. TiVo customers can also access real-time television channels, manage their TiVo box with a laptop, smart phone or tablet and have access to cloud storage for personal data. Virgin Media-U.K. also offers a TiVo app for the Netflix video service that allows up to five individual profiles on a single account. At December 31, 2015, Virgin Media had 2.9 million connected TiVo customers. Virgin Media-U.K. does not offer an analog video service.

Virgin Media-U.K. offers its subscribers premium digital channels from Sky plc (**Sky**) through an agreement with Sky and premium BT Sport channels through an agreement with BT Group plc (**BT**). Virgin Media-U.K. subscribers may receive these channels through a smart card on Virgin Media-U.K.'s network as part of Virgin Media-U.K.'s services or separately for an incremental subscription fee. In addition, Virgin Media-U.K. subscribers using TiVo may access internet programming services and a Eurosport app pursuant to agreements between Virgin Media and such service providers.

Through its twisted copper network, Virgin Media-U.K. offers fixed-line telephony services to its residential customers. Virgin Media's telephony services via VoIP are only available to its business customers.

Ireland. To complement its digital offering in Ireland, Virgin Media-Ireland offers its digital subscribers several premium channels (sports, movies, adult, ethnic and kids). Virgin Media-Ireland's services include Horizon TV and, at December 31, 2015, it had 149,500 connected Horizon TV subscribers. It also offers the on-line streaming service Horizon Go and the video service MyPrime, which Virgin Media-Ireland launched in March 2015. MyPrime is available to Horizon TV customers for no additional charge. In late 2015, Virgin Media-Ireland launched its mobile services as an MVNO and it launched Replay TV.

• Unitymedia. Unitymedia's operations in Germany are located in the German federal states of Baden-Württemberg, North Rhine-Westphalia and Hesse and include the major cities of Cologne, Dortmund, Düsseldorf, Essen, Frankfurt, Karlsruhe, Mannheim, Stuttgart and Wiesbaden. Unitymedia offers triple-play services consisting of video, internet and fixed-line telephony services in nearly all of its footprint. Unitymedia also offers quadruple-play services that include mobile voice and data services as an MVNO through an arrangement with a mobile communications provider. Unitymedia customers have access to an extensive network of public WiFi hotspots.

For its video cable customers, Unitymedia offers Horizon TV, an HD receiver and a CI+ module. At December 31, 2015, Unitymedia had almost 460,000 connected Horizon TV subscribers. No set-top box, CI+ module or smart card is, however, required to receive basic digital services because Unitymedia's basic digital service is unencrypted in its German footprint. In addition, Horizon Go is available, giving subscribers access to over 100 linear channels of which over 80 channels, plus subscription VoD programming, may be accessed outside the home. Unitymedia also offers the subscription VoD service Maxdome, which is available via the internet on the television or on mobile devices via the Horizon Go app. In addition to its premium video offerings, through an agreement with Sky Deutschland AG, a subsidiary of Sky (Sky Deutschland), Unitymedia offers its subscribers premium video channels from Sky Deutschland. Unitymedia subscribers may receive Sky Deutschland channels for an incremental subscription fee through a smart card on the Unitymedia network.

Approximately two-thirds of Unitymedia's video customers are in multiple dwelling units where Unitymedia has the billing relationship with the landlord or housing association or with a third party (**Professional Operator**) that operates and administers the in-building network on behalf of housing associations. Many of these agreements allow Unitymedia to offer its digital video, broadband internet and fixed-line telephony services directly to the end customer. Professional Operators may procure the basic video signals from Unitymedia at volume-based discounts and will generally resell them to housing associations with whom the operator maintains the customer relationship. Unitymedia has entered into agreements with Professional Operators, such as Tele Columbus Multimedia GmbH, that allow Unitymedia to market its digital video, broadband internet and fixed-line telephony services directly to the Professional Operator's subscriber base.

Unitymedia has entered into various long-term agreements with the incumbent telecommunications operator, Deutsche Telekom AG (**Deutsche Telekom**), for the lease of cable duct space and hubs, as well as use of fiber optic transmission systems, towers and facility space. In addition, Unitymedia purchases a portion of the electricity required for the operation of its networks through Deutsche Telekom under such agreements. Unitymedia's ability to offer its broadband communications services to customers is dependent on the agreements with Deutsche Telekom. These agreements are long-term and may only be terminated under certain limited exceptions. Any termination, however, would have a material adverse effect on the operations of Unitymedia. For information on a legal action that Unitymedia commenced against Deutsche Telekom in December 2012 regarding these agreements, see note 17 to our consolidated financial statements included in Part II of this Annual Report on Form 10-K.

• Ziggo. Ziggo's operations in the Netherlands are located throughout most of the Netherlands and include the major cities of Amsterdam, Rotterdam, The Hague, Utrecht and Maastricht. Ziggo offers video, internet, fixed-line telephony and mobile services as an MVNO.

Digital subscribers may subscribe to premium channels, including HBO, Film1, Ziggo Sport Totaal (includes six sport channels), Fox Sports International and the premium football league channel, Fox Sports Eredivisie, alone or in combination, for additional monthly charges. VoD services, including catch-up television, are available on a subscription or a transaction basis, depending on location and the tier of digital service selected by the subscriber. VoD services are also available to CI+ users. A subscription-based VoD service is included in the extended digital tier for no additional charge. The transaction VoD service includes over 3,000 titles of on-demand content.

Horizon TV and its products are available to customers as are apps on the gateway device that provide access to various internet services, such as YouTube and Facebook. At December 31, 2015, Ziggo had over 700,000 connected Horizon TV subscribers. Ziggo offers its customers a cloud-based interactive television service using existing set-top boxes. By combining IP protocol with the standard set-top box, devices without built-in hardware functionality for interactivity can

make use of interactive services through the Ziggo cable network. Also available is a CI+ module that enables subscribers to Ziggo's digital video service to view such service without a set-top box and use a single remote control. To utilize this service, Ziggo customers must have a CI+ enabled television and obtain the CI+ module and smart card from Ziggo. In 2015, Ziggo launched its Ziggo Sport channel, which is available exclusively to Ziggo customers.

• Belgium. The Telenet operations in Belgium attributed to the Liberty Global Group are conducted under the Telenet brand. At December 31, 2015, we owned 56.9% of Telenet's outstanding ordinary shares. Telenet offers quadruple-play services consisting of video, broadband internet, fixed-line telephony and mobile voice and data services, primarily to residential customers in the Flanders region and approximately one-third of the city of Brussels. In addition, pursuant to an agreement executed on June 28, 2008 (the PICs Agreement) with four associations of municipalities in Belgium (the pure intercommunales or PICs), Telenet leases the PICs broadband communications network and, accordingly, makes its services available to all of the homes passed by the cable network owned by the PICs.

Telenet's premium video channels include general entertainment, sports (including non-exclusive broadcasting rights for the domestic football league), documentary, foreign language, kids, music, adult and movies. Telenet's enhanced video customers get access to Yelo Play. Yelo Play allows Telenet's enhanced video customers to remotely manage their DVR, view programs remotely (up to seven days after the original broadcast) and access VoD with a laptop, smart phone or tablet in the home and out of the home. At December 31, 2015, approximately 26% of its enhanced video customers were actively using Yelo Play. Telenet also offers a CI+ module for an incremental monthly charge to access its encrypted digital service.

Telenet has an extensive network of Community WiFi across its footprint, branded "Wi-Free". The Community WiFi provides free WiFi access to its customers who are traveling within its footprint. Telenet has nearly 1.3 million access points to the Community WiFi as of December 31, 2015, including approximately 2,000 public hotspots covering train stations, bars, hotels and similar public places. In addition, Telenet offers, individually and as a bundle, fixed-line telephony services over its network and mobile telephony services as a full MVNO under the "Telenet Mobile" brand name

Telenet has a direct customer relationship with the basic and enhanced video subscribers on the PICs network. Pursuant to the PICs Agreement, Telenet has full rights to use substantially all of the PICs network under a long-term capital lease. Unless extended, the PICs Agreement will expire on September 23, 2046, and cannot be terminated earlier (except in the case of non-payment or bankruptcy of Telenet).

• UPC CHAT. UPC CHAT operates a cable network in Switzerland and cable and DSL networks in Austria under the UPC Cablecom (until spring 2016) and UPC brands (collectively, UPC CHAT). The DSL services are provided over an unbundled loop or, in certain cases, over a shared access network, and available in the majority of Austria wherever the incumbent telecommunications operator has implemented DSL technology. UPC CHAT's operations are located in 24 of the 26 member states (Cantons) of Switzerland, including major cities such as Bern, Zürich, Lausanne and Geneva, and in regional clusters in Austria encompassing the capital city of Vienna, the regional capitals of Graz, Innsbruck and Klagenfurt, two smaller cities and the Vorarlberg region. Three of the cities in Austria (Vienna, Wr. Neustadt and Baden), directly or indirectly, own 5% of the local operating subsidiary of UPC CHAT serving the applicable city.

UPC CHAT offers mobile voice and data services as an MVNO. UPC CHAT no longer offers analog service in Switzerland; however, customers in Austria with the necessary equipment and who subscribe to UPC CHAT's analog service are also able to access its basic digital service, which is unencrypted in the Austria. A CI+ module or set-top box in combination with a smart card is, however, required to view any of UPC CHAT's encrypted digital packages with the customer paying the incremental charge over the digital entry tier's applicable rate.

Switzerland. UPC CHAT's basic video service in Switzerland is available in any one of three languages (French, German or Italian). It offers the basic video service as a triple-play package consisting of video, broadband internet and fixed-line telephony services, plus an app to use the fixed-line telephony service on a smart phone. UPC CHAT offers Horizon TV and its family of products and, at December 31, 2015, it had 295,000 connected subscribers. UPC CHAT also offers apps that allow its subscribers to remotely manage a DVR, view linear channels, replay a linear channel without recording it and access VoD with a laptop, smart phone or tablet anywhere a broadband or WiFi connection is available. In each of its digital cable packages in Switzerland, UPC CHAT includes the functionality for transaction-based VoD service (depending on location), including catch-up television, pay-per-view services and HD channels. Fully integrated in the VoD service is the video library MyPrime. MyPrime is included in the extended digital tiers for no additional charge.

For two-thirds of its video subscribers in Switzerland, UPC CHAT maintains billing relationships with landlords or housing associations and provides basic video service to the tenants. The landlord or housing association administers the billing for the basic video service with their tenants and manages service terminations for their rental units.

UPC CHAT offers digital video, broadband internet and fixed-line telephony services directly to the video cable subscribers of those partner networks that enter into service operating contracts with UPC CHAT. UPC CHAT has the direct customer billing relationship with these subscribers. By permitting UPC CHAT to offer some or all of its digital video, broadband internet and fixed-line telephony products directly to those partner network subscribers, UPC CHAT's service operating contracts have expanded the addressable markets for UPC CHAT's digital products. In exchange for the right to provide digital products directly to the partner network subscribers, UPC CHAT pays to the partner network a share of the revenue generated from those subscribers. UPC CHAT also provides network maintenance services and engineering and construction services to its partner networks.

<u>Austria</u>. UPC CHAT's video service (digital and analog) in Austria is available primarily in the German language. Its premium packages include ethnic channels (such as Serb, Bosnian and Turkish channels), music, adult and international channels. In addition, through an agreement with Sky Deutschland, UPC CHAT offers its digital subscribers in Austria a number of premium channels, including HD channels, from Sky Deutschland. UPC CHAT offers its broadband internet service over cable and over DSL. In 2016, UPC CHAT plans to expand its services in Austria to include the subscription VoD service MyPrime.

• Central and Eastern Europe. UPC CHAT also operates cable networks under the UPC brand in Poland (UPC Poland), Hungary (UPC Hungary), the Czech Republic (UPC Czech), Romania (UPC Romania) and Slovakia (UPC Slovakia). VoD service, including catch-up television, is available to our subscribers in Hungary and in major metropolitan areas in Poland. UPC Hungary, UPC Poland and UPC Romania have each launched apps for no charge to subscribers that permit them to view the digital channel programming guide, schedule DVR recordings from any location and use their smart phones as a television remote control. Except in Slovakia where its basic digital service in encrypted, customers with the necessary equipment and who have a monthly subscription to the analog service are also able to access the basic digital service, which is unencrypted. The Liberty Global Group also has attributed to it DTH operations in most of these countries, which is provided through UPC DTH. Community WiFi is available in each of these countries, except Slovakia, with approximately 1.6 million access points in Central and Eastern Europe.

<u>Poland</u>. UPC Poland's operations are located in regional clusters encompassing nine of the 10 largest cities in Poland, including the capital city of Warsaw and the cities of Cracow and Katowice. UPC Poland offers a catch-up television service and Horizon Go. UPC Poland launched Horizon TV using the RDK cloud-based system in select areas in November 2014 with a full commercial launch in January 2015. At December 31, 2015, it had over 128,000 connected Horizon TV subscribers. The video service MyPrime became available to video subscribers in December 2014 and at December 31, 2015, had over 145,000 subscribers. UPC Poland offers a lifeline tier and basic tier of digital programming, as well as extended tiers and premium packages.

<u>Hungary</u>. UPC Hungary's operations are available to over 40% of the households in Hungary, including households located in the capital city of Budapest. In each of its digital cable packages, UPC Hungary includes the functionality for transaction-based VoD services. UPC Hungary offers to its subscribers apps for various online services (such as YouTube, Picasa, Flickr and others). For its digital video subscribers, UPC Hungary offers a CI+ module, which in combination with a smart card, allows the subscriber to view the digital service without the need for a set-top box. It also offers the video service MyPrime and the online streaming service HBO Go. HBO Go is available at no additional charge to UPC Hungary customers who subscribe to the HBO channels. UPC Hungary offers its fixed-line telephony services through circuit-switched fixed-line telephony to subscribers on its twisted copper pair network and through VoIP over its two-way capable cable network.

The Czech Republic. UPC Czech's operations are located in cities and towns throughout the Czech Republic, including Prague, Brno, Ostrava and Plzen. Over 80% of the subscribers to UPC Czech's digital video service receive such service through a set-top box with HD or HD DVR functionality. For its video cable customers, UPC Czech offers Horizon TV through the RDK cloud-based system and the online video service Horizon Go. At December 31, 2015, UPC Czech had 20,000 connected Horizon TV subscribers, plus an additional 174,000 subscribers with Horizon TV access via upgraded set-top boxes. MyPrime is included in the Horizon TV offer. Approximately 47% of UPC Czech's digital cable subscribers receive the basic and extended tier services. UPC Czech's analog service is offered only in areas where its digital service is not available and includes a lifeline tier of services.

Romania. UPC Romania's operations are located primarily in three regional clusters, which include nine of the 12 largest cities (each with more than 150,000 inhabitants) in Romania, including the capital city of Bucharest and the cities of

Cluj-Napoca, Timisoara, Iasi and Constanta. UPC Romania's video service includes Romanian terrestrial broadcast channels, selected European satellite programming and other programming. In November 2014, UPC Romania launched the online video service Horizon Go. In addition to its standard broadband internet service offerings, UPC Romania also offers a 256 Kbps service at no incremental charge as an inducement for customers to subscribe to certain services.

Slovakia. UPC Slovakia's operations are located in seven regions in Slovakia, including the five largest cities of Bratislava, Kosice, Presov, Banská Bystrica and Zilina. Besides its video cable services, UPC Slovakia offers video services in certain areas over its MMDS network. UPC Slovakia offers almost all of the Slovakian terrestrial, cable and local channels available, selected European satellite and other programming, and audio channels. The online streaming service HBO Go is available to HBO channel subscribers. In July 2015, UPC Slovakia launched Horizon Go and in November 2015 MyPrime became available via Horizon Go. Subscribers to UPC Slovakia's digital video services may receive such service through a CI+ module in combination with a smart card without the need for a set-top box. UPC Slovakia's analog service, which is not available to its MMDS subscribers, includes a lifeline tier of service.

<u>UPC DTH</u>. UPC DTH, based in Luxembourg, provides DTH services in the countries of the Czech Republic, Hungary and Slovakia and manages the Romania DTH provider FocusSat. UPC DTH and FocusSat together provide DTH services to almost 830,000 customers. UPC DTH offers a lifeline tier and, either directly or through FocusSat, a basic tier, an extended tier and premium channel options, as well as 25 free-to-air (**FTA**) television and audio channels. A subscriber to its basic tier may receive 50 to 70 digital video channels depending on their location. Its premium channel offerings cover a range of interests (such as movies, adventure, sports, adult and comedy). In 2015, UPC DTH launched its first triple play offer in Hungary. Through a third-party network, UPC DTH subscribers in Hungary may also receive broadband internet with in-home WiFi and telephony services in addition to their DTH service. In the Czech Republic and Slovakia, UPC DTH offers CI+ module, which enables its subscribers in these countries to receive its signals without a set-top box. DVRs are also available. In 2014, UPC DTH added HBO Go for its HBO customers in Hungary, Czech Republic and Slovakia. For no additional charge, such customers may access their HBO channels anytime, anywhere on multiple devices.

Subscribers to the DTH services may pay either an annual fee and receive an activation card for the lifeline tier of video service or pay a monthly fee for a basic or extended tier of service. UPC DTH provides DTH services to 20% of our total video subscribers in the Czech Republic, 31% of our total video subscribers in Hungary, 28% of our total video subscribers in Slovakia and, through FocusSat, 28% of our total video subscribers in Romania.

UPC DTH and FocusSat have agreements with Telenor Satellite Broadcasting for the lease of transponder space, including expansion capacity, on the Thor satellites. These agreements will expire on December 31, 2017, unless extended as provided in such agreements. UPC DTH offers both standard definition (**SD**) and HD services to all of its customers in Hungary, the Czech Republic, Slovakia and, through FocusSat, in Romania.

#### Operations—LiLAC Group

Our operations attributed to the LiLAC Group are currently located in Chile and Puerto Rico, where we offer a variety of broadband services over our cable distribution systems, plus mobile services in Chile. Our broadband distribution business and mobile services in Chile are conducted through our wholly-owned subsidiary VTR. Our broadband telecommunications service in Puerto Rico is conducted through our indirect 60%-owned subsidiary Liberty Puerto Rico.

VTR. VTR offers triple-play services consisting of video, broadband internet and fixed-line telephony services in 34 communities within Santiago and 42 communities outside Santiago, including Chile's largest cities, such as Iquique, Antofagasta, Concepción, Viña del Mar, Valparaiso and Rancagua, and smaller cities across Chile. VTR obtains programming from the United States, Europe, Argentina and Mexico. VTR also carries domestic Chilean cable programming, which includes local events such as football (soccer) matches and regional content.

VTR offers a full range of digital video services, including basic and premium packages. All digital video services are encrypted and require a set-top box provided by VTR. In addition, digital cable customers may subscribe to one or more premium video channels, including HD channels for an additional monthly charge. The premium channels include movies, sports, international and adult channels. VoD services, including catch-up television, are available on a subscription or a transaction basis, depending on location. VoD services include over 3,900 titles of on-demand content, including multi-screen features. VTR plans to launch Horizon TV through an advanced, cloud-based platform in 2016. VTR's analog service is offered only in areas where its digital service is not available.

VTR offers its broadband internet services in 34 communities within Santiago and 42 communities outside Santiago. In its highest tier of service, VTR offers high-speed internet service with download speeds of up to 160 Mbps from February 2016. VTR also offers multi-feature telephony service over its cable network to customers in 34 communities within

Santiago and 42 communities outside Santiago via either circuit-switched telephony or VoIP, depending on location. VTR offers mobile voice and data services as a full MVNO pursuant to an arrangement with a third-party mobile telecommunications provider. Through this arrangement, in 2015, VTR became the first emergent MVNO in Chile to have LTE services in all its voice and data plans.

Liberty Puerto Rico. Liberty Puerto Rico offers only digital broadband services and provides these services in the San Juan metropolitan area and numerous other municipalities covering over 80% of the island. Liberty Puerto Rico's video service includes a basic tier of digital programming, an extended tier and premium packages, as well as a VoD service. The Liberty Puerto Rico network includes a 360 mile fiber ring around its network providing enhanced interconnectivity points to the island's other local and international telecommunications companies. Liberty Puerto Rico is exploring the addition of MVNO arrangements to its product line-up and other features of mobility to its service. For example, its Community WiFi is available to its customers in Plaza Las Americas, a major shopping center in San Juan.

#### Competition

The markets for video, broadband internet, fixed-line telephony and mobile services are highly competitive and rapidly evolving. In addition, technological advances and product innovations have increased and are likely to continue to increase the number of alternative providers available to our customers. Consequently, our businesses have faced and are expected to continue to face significant competition in these markets in the countries in which they operate and specifically, as a result of deregulation, in the European Union (EU). The percentage information in this section reflects the data for each country regardless of the extent of our footprint in such country and is as of the date of the relevant sources listed in the following sentences. The percentage information provided below for the various countries is based on information from the subscription based website DataXis for the third quarter of 2015. The competition in certain countries in which we operate is described more specifically after the respective competition overview on video, broadband internet, fixed-line telephony and mobile services.

#### Video Distribution

Our businesses compete directly with a wide range of providers of communication and entertainment services to consumers. Depending upon the country and market, these may include:

- traditional FTA broadcast television services;
- DTH satellite service providers;
- other fixed-line telecommunications carriers and broadband providers, including the incumbent telephony operators offering (a) DTH satellite services, (b) IPTV over broadband internet connections using asymmetric DSL or very high-speed DSL technology (VDSL) or an enhancement to VDSL called "vectoring", (c) IPTV over fiber optic lines where the fiber is to the home, cabinet, or building or to the node networks (fiber-to-the-home/-cabinet/-building/-node is referred to herein as FTTx), or (d) long-term evolution wireless service, the next generation of ultra high-speed mobile data, also called "4G" (referred to herein as LTE) services;
- over-the-top video content aggregators utilizing our or our competitors' high-speed internet connections;
- digital terrestrial television (DTT) broadcasters, which transmit digital signals over the air providing a greater number
  of channels and better quality than traditional analog broadcasting;
- other cable operators in the same communities that we serve;
- satellite master antenna television systems, commonly known as "SMATVs", which generally serve condominiums, apartment and office complexes and residential developments;
- MMDS operators; and
- movie theaters, video stores, video websites and home video products.

Our businesses also compete to varying degrees with other sources of information and entertainment, such as online entertainment, newspapers, magazines, books, live entertainment/concerts and sporting events.

We believe that our deep-fiber access provides us with several competitive advantages in the areas served by our network. For instance, our cable network allows us to concurrently deliver internet access, together with real-time television and VoD content, without impairing our high speed internet service than comparable services of other providers. In addition, our cable infrastructure allows us to provide triple-play bundled services of broadband internet, television and fixed-line telephony services without relying on a third-party service provider or network. Our capacity is dimensioned to support peak consumer demand. In serving the business market, many aspects of the network can be leveraged at very low incremental costs given that business demand peaks at a time when consumer demand is low, and peaks at lower levels than consumer demand. In response to the continued growth in over-the-top viewing, we have launched a number of innovative video services, including Horizon Go, MyPrime and Replay TV.

# Liberty Global Group

In the European countries in which we operate, over 90% of the households have a television. Our principal competition in the provision of video services in our European markets has historically been from traditional FTA broadcasters; DTH satellite providers in many markets, such as the U.K., Germany, Austria, Ireland, Poland, the Czech Republic and Slovakia, where we compete with long-established satellite platforms; incumbent telecommunications providers using fiber technology; and cable operators in various markets where portions of our systems have been overbuilt. In addition, in Belgium we expect we will experience competition on own network as a result of the Belgian Regulatory Authorities granting third-party operators (including the incumbent telephony operator) access to cable operators' networks. See *Regulatory Matters—Europe—Belgium*. Mobile broadband has gained a noticeable share of subscribers, and competition from SMATV or MMDS could also be a factor. In addition, over-the-top viewing is a competitive factor. Overall, we are experiencing more and more convergence as customers are increasingly looking to receive all their media and communication services from one provider at attractive prices. As a result, our ability to offer triple-play or quadruple-play bundles is a key marketing concept to continue to attract and retain customers.

Over the last several years, competition has increased significantly from both new entrants and established competitors using advanced technologies, aggressively priced services and exclusive channel offerings. Our competitors are also improving their video platforms with next generation set-top boxes. DTT is a significant part of the competitive market in Europe as a result of a number of different business models that range from full blown encrypted pay television to FTA television. Similarly, VDSL, which is either provided directly by the owner of the network or by a third party, is a significant part of the competitive environment in many of our markets as are FTTx networks. In all of our European markets, competitive video services are offered by the incumbent telecommunications operator, whose video strategies include IPTV over DSL, VDSL and FTTx networks and in some cases DTH and DTT. The ability of incumbent operators to offer the triple-play of video, broadband internet and fixed-line telephony services and, in some countries, a quadruple-play with mobile services, is exerting competitive pressure on our operations, including the pricing and bundling of our video products. The providers of DTH satellite services, particularly in our markets in the U.K., Germany and Central and Eastern European, are also significant competitors. In addition, over-the-top video aggregators are active in all our markets with their VoD service for television series and movies, catch-up television and linear channels from broadcasters. In some cases, these over-the-top services are provided free-of-charge, or the content library of such services are offered on an unlimited basis for a monthly fee. Typically these services are available on multiple devices and in and out of the home. With consumers' desire to view content when and where it suits them, the ability to meet such demand through our TV everywhere products is key to our competitive position.

Our ability to continue to attract and retain customers depends on our continued ability to acquire appealing content and services on acceptable terms and to have such content available on multiple devices and outside the home. Some competitors, such as Swisscom AG (Swisscom) in Switzerland, have obtained long-term exclusive contracts for certain sports programs, which limits the opportunities for other providers, including our operations, to offer such programs. Other competitors also have obtained long-term exclusive contracts for programs, but our operations have access to certain of such programming through select contracts with these companies, including Sky Deutschland in Germany and Austria and Sky in the U.K. and Ireland. If exclusive content offerings increase through other providers, programming options could be a deciding factor for subscribers on selecting a video service.

Portions of our systems have been overbuilt by FTTx networks in the Czech Republic, Romania, Slovakia, Hungary, the Netherlands and Switzerland. Based on research of various telecommunication publications, including by the Organization for Economic Cooperation and Development (**OECD**) and internal estimates, our cable networks in several of our operations have been overbuilt by FTTx networks as follows: Ziggo--30%, UPC CHAT-Switzerland--36%, UPC Czech--65%, UPC Hungary--13%, UPC Romania--92% and UPC Slovakia--74%. Although we have extensive FTTx overbuild in Switzerland, connectivity to the FTTx network is not available at all locations. In addition, government and quasi-government entities in certain of the countries in which we operate in Europe continue to invest in FTTx networks, creating another source of competition. In order to achieve download speeds of up to 100 Mbps or greater for customers, incumbent telecommunications operators are increasingly adopting VDSL with vectoring and bonding technologies as a more cost efficient solution compared to FTTx initiatives. Vectoring is a

transmission method that coordinates line signals to reduce crosstalk levels and improve performance. Bonding is a method of taking channels on either DSL or cable plant and bond those channels together for a higher bandwidth throughput.

Our Central and Eastern European markets are also experiencing significant competition from other cable operators. These cable operators have significantly overbuilt our operations in Poland and Hungary and to a lesser extent in Romania and Slovakia. Based on research of various telecommunication publications, including the OECD and internal estimates, approximately 49% and 51% of our operations in Poland and Hungary, respectively, are overbuilt by other cable providers. Also, approximately 10% in each of our footprints in Romania and Slovakia is overbuilt by other cable providers.

In most of our Central and Eastern European markets, we also face intense competition from DTH services. In addition to overbuilding portions of our cable network in Hungary and Romania, Digi TV, the DTH platform of RCS & RDS S.A. (**Digi TV**), a Romanian cable, telephony and internet service provider, is targeting our analog cable and DTH customers with aggressively-priced DTH packages. In the Czech Republic and Slovakia, "**SkyLink**", the brand name of M7 Group SA, a European provider of DTH services, is a DTH competitor providing aggressively-priced packages of video content. The incumbent telecommunications operator, Telekom Romania Communications S.A., in Romania also operates a competing DTH platform. UPC DTH offers advanced services and functionality, including DVR and premium content, to most of our Central and Eastern European markets. UPC DTH's share of the subscription-based television market is 8% for Hungary, 5% for the Czech Republic, 4% for Slovakia and, through FocusSat, 5% for Romania.

In order to gain video market share, the incumbent operators and alternative service providers in a number of our larger markets have been pricing their DTT, VDSL or DTH video packages at a discount to the retail price of the comparable digital cable service and, in some cases, including DVRs as a standard feature.

To meet the challenges in this competitive environment, we compete on value by offering advanced digital services, such as DVR functionality, HD, VoD, catch-up television, Replay TV, multiscreen services and multi-media gateways. We seek to compete by accelerating the migration of our customers from analog to digital services, using such advanced digital features and offering attractive content packages and bundles of services at reasonable prices. In each of our countries we also tailor our packages to include attractive channel offerings and offer recurring discounts for bundled services and loyalty contracts. In addition, from time to time, digital channel offerings are modified by our operations to improve the quality of our programming. In all of our operations, we use the triple-play bundle as a means of driving video, as well as other products where convenience and price can be leveraged across the portfolio of services. In several of our markets, we have expanded our services to include mobile voice and data. We also continue to explore new technologies that will enhance our customer's television experience. In this regard, to further enhance our digital video services, we launched our next generation multimedia home gateway Horizon TV to meet our customers desire to view programming anytime and anywhere. We continue to update Horizon TV with new applications and expand its availability in our markets, including the recent launch of a cloud-based Horizon TV platform in the Czech Republic.

• Virgin Media-U.K. Virgin Media-U.K. is the sole provider of video cable services in substantially all of its network area and, in terms of the number of video cable customers, the largest cable television provider in the U.K. Virgin Media's video cable services are available to approximately 48% of the U.K. television households and it serves 14% of the total U.K. television market. Virgin Media-U.K.'s digital television services compete primarily with those of Sky, which is the primary pay satellite television platform in the U.K. Sky has approximately 10.2 million subscribers in the U.K., or 38% of the total television market. Other significant competitors are BT and TalkTalk Telecom Group plc (TalkTalk), each of which offer IPTV services in the U.K. BT (which is acquiring Everything Everywhere Limited (EE), a British mobile network provider, in early 2016), and Sky have also launched next-generation set-top boxes and compete with Virgin Media-U.K. for consumers seeking bundled services.

Sky owns the U.K. rights to various entertainment, sports and movie programming content and channels. Sky is both a principal competitor in the pay-television market and an important supplier of content to us. Various Sky channels, including Sky Sports, are available over Sky's satellite system and our cable networks, as well as via Sky's apps and online players and other television platforms, and some of the channels are available on BT and TalkTalk platforms. Virgin Media-U.K. distributes several basic and premium video channels supplied by Sky. BT is also both a principal competitor and an important supplier of content to us. BT owns premium BT Sport channels, providing a range of sports content, including football (soccer) from the English Premier League and exclusive rights to the UEFA Champions League and the UEFA Europa League. The BT Sport channels are available over BT's IPTV platform, via BT's apps and online players, Sky's satellite system and our cable network. In addition, FTA DTT and internet-connected television services are a competitive factor. For example, Netflix, Amazon Prime, Google and Apple have all launched over-the-top products in the U.K.

In this competitive market, Virgin Media-U.K. is expanding its broadband network and, in 2015, realigned its triple-play bundles and upgraded TiVo set-top boxes to include storage and display of personal photos, videos and music and catch-

up services. It also offers Virgin TV Anywhere, which allows its video subscribers to stream linear channels and access certain VoD content anywhere with WiFi connectivity. In addition, Virgin Media-U.K.'s ability to include mobile for a low incremental fee creating a quadruple-play bundle is a key market offer.

- Virgin Media-Ireland. Virgin Media-Ireland is the sole provider of video cable services in Ireland. Virgin Media-Ireland's video cable service is available to over half of the television households in Ireland and it serves 23% of the total television market. Virgin Media-Ireland's primary competition for video customers is also from Sky, which provides DTH satellite services to 41% of the television households in Ireland. Sky offers competitively priced triple-play services and promotional discounts for new customers. Virgin Media-Ireland also faces competition from Eircom Limited (Eir), which also offers triple-play services, as well as an IPTV video service, and smaller video providers, including providers using FTTx networks. To enhance its competitive position, Virgin Media-Ireland offers Horizon TV, MyPrime and Replay TV and, at the start of 2016, increased its download internet speed to 360 Mbps for its mass market double- and triple-play bundles.
- Unitymedia. Unitymedia is the second largest cable television provider in Germany and the largest cable television provider in the federal states of Baden-Württemberg, North Rhine-Westphalia and Hesse based on the number of video cable subscribers. Unitymedia's video cable services are available to approximately 33% of the television households in Germany and it serves 17% of the total television market. Unitymedia's primary competition is from FTA television received via satellite. Unitymedia's primary competitor for pay TV services is the IPTV services over VDSL and FTTx and DTH of the incumbent telecommunications operator, Deutsche Telekom. Deutsche Telekom has over 2.6 million video subscribers in Germany, or 7% of the total television market, for primarily its IPTV services and has announced plans to cover approximately 80% of German homes with its VDSL network by 2018. We estimate Deutsche Telekom will have overbuilt nearly our entire network with VDSL by the end of 2016. Within parts of its VDSL footprint, Deutsche Telekom started to implement vectoring technology, enhancing maximum broadband speeds to up to 100 Mbps from the current speeds of up to 50 Mbps. Deutsche Telekom further announced its ambition to have implemented super vectoring technology across all cable network areas by 2018, enhancing broadband speeds in these areas to up to 250 Mbps.

Deutsche Telekom offers competitively-priced triple-play bundles and promotional discounts for new customers. In addition, Vodafone Group Plc (Vodafone) bundles its IPTV service with its broadband offerings through Deutsche Telekom's DSL network under a resell agreement making it a significant competitor in the double-play and triple-play market in our footprint. Both of these companies have expanded their bundle offers to include mobile products. These converged offerings may enable Deutsche Telekom and Vodafone to reduce churn and attract new customers.

Deutsche Telekom and Professional Operators compete with Unitymedia for housing association contracts. Over the last few years, Deutsche Telekom has become increasingly competitive in this market. Professional Operators typically procure the broadcast signals they distribute from Unitymedia or from FTA television received via satellite. Certain Professional Operators may also use such opportunities to build their own distribution networks or to install their own head-ends for receiving satellite signals.

Other alternative distributors of television services are an increasing threat as well. To a lesser extent, Unitymedia competes with Sky Deutschland's digital premium subscription service to households that receive their basic television service via FTA satellite, cable or other technologies. Over-the-top content providers are also creating competitive pressure, including the on-line video streaming services of Sky Deutschland and the services of ProSiebenSAT.1 Media AG's Maxdome, Netflix and Amazon Prime. In addition, there is a risk of competition for video services from commercial broadcasters and other content providers that currently pay Unitymedia fees for transmitting their signals, but may seek to diversify their distribution on alternative platforms such as over-the-top video through high-speed internet connections.

To enhance its competitive position, Unitymedia offers Horizon TV and the Horizon family of products, including Horizon Go. To attract customers to its double- and triple-play bundles, Unitymedia has realigned its promotional offers. It also makes mobile available creating converged bundles. Mobile customers receive a discount when they also subscribe to certain bundles.

• Ziggo. Ziggo is the largest cable television provider in the Netherlands based on the number of video cable subscribers. Ziggo's video cable services are available to approximately 92% of the television households in the Netherlands and it serves 54% of the total television market. Ziggo experiences most of its competition in the Netherlands from other fixed-line telecommunications carriers and broadband providers, including the incumbent telecommunications operator Koninklijke KPN N.V. (KPN). KPN offers (a) IPTV over FTTx networks, (b) IPTV through broadband internet connections using DSL or VDSL or an enhancement to VDSL called "vectoring", (c) DTT and (d) LTE services. KPN provides subscription video services to 29% of the total television households in the Netherlands. Its ability to offer bundled triple-play of video, broadband internet and telephony services and a quadruple-play with mobile services, places

significant competitive pressure on Ziggo's operations. KPN's VDSL service includes VoD and DVR functionality, catchup television, replay television and second screen viewing. In addition, KPN has launched its own over-the-top video service. Portions of our network have also been overbuilt by KPN's and other providers' FTTx networks, and expansion of these networks is expected to continue. Another principal competitor in the provision of video services is from the DTH provider CanalDigitaal, a subsidiary of M7 Group S.A. CanalDigitaal, which offers DTH and DTT services, provides subscription video services to 11% of the total television households in the Netherlands.

To improve its competitive position, Ziggo introduced new portfolios for its double- and triple-play offers. For an incremental fee, customers may also include mobile voice and data to any bundle package. The bundle options give subscribers the option to select various combinations of services, including high-speed internet, fixed-line telephony options and content options, to meet their needs. Also, Ziggo's extended digital video tiers include Horizon TV, Replay TV and MyPrime. Horizon Go is also available. In addition, Ziggo continues to improve the quality of its programming and modify its video options by offering attractive content packages. For example, in November 2015, it launched Ziggo Sport, its new exclusive sports channel, which Ziggo added to all existing video packages for no additional charge.

- Telenet. Telenet is the sole provider of video cable services in its network area and the largest cable television provider in Belgium. Its video cable service is available to approximately 62% of the television households in Belgium and it serves approximately 43% of the total television market. Telenet is the largest subscription television provider in Belgium based on the number of pay video subscribers. Telenet's principal competitor is Proximus NV/SA (formerly Belgacom NV/SA) (Proximus), the incumbent telecommunications operator, which has interactive digital television, replay television, VoD and HD service as part of its video offer, as well as a remote access service. Proximus also offers doubleplay and triple-play bundles and discounts on mobile services when taken with a triple-play offer. Approximately 29% of total television households in Belgium subscribe to Proximus' IPTV services over its DSL and VDSL networks. Also, with the decision that Telenet and other Belgian cable operators must give alternative providers access to their cable networks, Telenet will be facing increased competition from other providers of video services who may then be able to offer triple- and quadruple-play services as well. For more information, see Regulatory Matters—Europe—Belgium. In order to compete effectively against alternative providers, Telenet uses its Digital TV platform, together with its extensive cable network, the broad acceptance of its basic cable television services and its extensive additional features, such as HD and DVR functionality, VoD offerings and its Play Sports channel. In addition, Telenet continues to enhance its Yelo Play app and programming, including extending its rights to the English Premier League through 2018 and the addition of other sports rights. Further, with its acquisition of BASE, Telenet will be able to expand its quad-play options for customers.
- UPC CHAT-Switzerland. UPC CHAT is the largest cable television provider in Switzerland based on the number of video cable subscribers and the sole provider in substantially all of our network area. UPC CHAT's video cable services are available to approximately 64% of the television households in Switzerland and it serves 39% of the total television market. Our main competitor is Swisscom, the incumbent telecommunications operator, which provides IPTV services over DSL, VDSL and FTTx networks to approximately 37% of all television households in Switzerland. Swisscom offers VoD services, DVR functionality and HD channels, as well as the functionality to allow remote access to its video services, and has exclusive rights to distribute certain sports programming. Swisscom is targeting our customers with its introduction of an ultra HD set-top box in early 2016. The set-top box will support HD and ultra HD content with plans to broadcast the Super League football (soccer) in ultra HD during the 2016-17 season. It is also updating its user interface to improve its other interactive services. Swisscom's internet speeds available in its bundled offers, include up to 100 Mbps on its VDSL network and up to either 300 Mbps or 1 Gbps in areas served by its FTTx network. Swisscom continues to aggressively expand its FTTx network to Switzerland households in our footprint, as well as in our partner network footprints. It has built its fiber-to-the-home network in several cities in cooperation with municipality-owned utility companies and, where no cooperation agreement has been reached, Swisscom is building its own fiber-to-the-home network. By the end of 2015, approximately 1.0 million homes and businesses in Switzerland have access to Swisscom's FTTx network.

Due to a small program offering, competition from terrestrial television in Switzerland is limited, with DTT available primarily along the borders with France and Italy. DTH satellite services are also limited due to various legal restrictions, such as construction and zoning regulations or rental agreements that prohibit or impede installation of satellite dishes. Over-the-top providers are, however, increasing the competitive pressure on video viewing offers. With respect to subscribers on partner networks, UPC CHAT competes with other service providers for the contracts to serve these subscribers.

To compete effectively in Switzerland, UPC CHAT promotes Horizon TV and its family of products together with replay television and MyPrime, giving subscribers the ability to personalize their programming and viewing preferences. It has

also increased the internet speeds for all its bundle customers, including a speed of up to 500 Mbps for its top extended digital tier bundles.

- UPC CHAT-Austria. In Austria, UPC CHAT is the largest cable television provider based on the number of video cable subscribers. UPC CHAT's video cable service is available to approximately 38% of the television households in Austria and it serves 14% of the total television market. UPC CHAT's primary competition in Austria is from FTA television received via satellite and DTT services by the public broadcaster. Competition from the VDSL services provided by the incumbent telecommunications operator, Telekom Austria AG (A1) (Telekom Austria), and from DTH satellite services offered by Sky Deutschland, also continue to increase. At various times, Telekom Austria offers promotional discounts for its VDSL service, which includes advanced features, such as VoD, when taken as part of either a double- or triple-play bundle. It also launched a video streaming service in 2015. To compete effectively, UPC CHAT realigned its bundle offers in 2015 and includes HD DVR in its extended digital video tiers. Horizon Go is also available and its top triple-play bundle includes internet speeds of up to 250 Mbps. To compete with over-the-top providers, including Telekom Austria, UPC CHAT is exploring offering its own video streaming service.
- Central and Eastern Europe. UPC Poland is the largest cable television provider in Poland based on the number of video cable subscribers. In 2015, UPC Poland expanded its services to a number of markets, including five new cities, resulting in UPC Poland's video cable services being available to approximately 21% of the television households in Poland. It serves 9% of the total television market. In providing video services, UPC Poland competes primarily with DTH service providers, including the largest DTH providers, Cyfrowy Polsat SA and NC+ platform (owned by the Vivendi Group), as well as Orange Poland, a subsidiary of France Telecom S.A. UPC Poland also competes with the IPTV services of Orange Poland, which is expanding its DSL, VDSL and FTTx networks, including to households in UPC Poland's footprint. UPC Poland competes with other cable operators with triple-play services, who have overbuilt portions of UPC Poland's operations. To enhance its competitive position, UPC Poland enhanced its sports channel offerings, realigned its portfolio of services and, for its extended tiers of bundle services, increased internet speeds and added MyPrime services. It also launched the Horizon TV cloud platform throughout its footprint and Horizon Go is also available.

UPC Hungary's video cable service is available to over 40% of the television households in Hungary and it serves 17% of the total television market in Hungary. Our subsidiary, UPC DTH, also provides satellite services in Hungary, in competition with other DTH providers. One of these, Digi TV, is an aggressive competitor. Digi TV has also overbuilt portions of UPC Hungary's cable service areas with its own cable network. As a DTH provider, Digi TV offers more HD channels, including key sports channels, than UPC DTH. In its cable foot print, Digi TV offers a competitively priced quad-play bundle. UPC Hungary also faces competition from the IPTV services of the incumbent telecommunications company Magyar Telekom, a subsidiary of Deutsche Telekom. To meet such competition, UPC Hungary emphasizes its competitively priced bundles, which have higher broadband speeds of up to 500 Mbps with up to 120 Mbps or 240 Mbps included in its core bundle offers. Its extended digital video tiers include MyPrime and, for its HBO customers, the online streaming service HBO Go. For DTH customers in Hungary, UPC DTH launched a triple-play offer in November 2015. Of the television households in Hungary, 7% subscribe to Digi TV's DTH service, 16% subscribe to Digi TV's cable service and 26% subscribe to Magyar Telekom's DTH or VDSL service. UPC DTH serves 8% of the television households in Hungary with its DTH service.

With the discontinuation of FTA analog services in the Czech Republic and Slovakia, DTH services have increased significantly in popularity, with SkyLink being the main provider. This company provides DTH services to approximately 27% and 31% of the television households in the Czech Republic and Slovakia, respectively. As in Hungary, Digi TV is also an aggressive competitor in the Czech Republic and Romania. Digi TV provides DTH services to 5% and 11% of the television households in the Czech Republic and Romania, respectively. In Slovakia, we compete with the DTH service provider, Slovak Telekom a.s., a subsidiary of Deutsche Telekom, which offers exclusive sports channels and is expanding its DTH network to cover not only Slovakia but other Central and Eastern European countries as well. In Slovakia, it serves 23% of the television households. UPC DTH provides DTH services to 3%, 5% and 3% of the television households in the Czech Republic, Romania and Slovakia, respectively. To stay competitive, UPC DTH offers prepaid DTH services in the Czech Republic, as well as a prepaid product through FocusSat in Romania. Also, FocusSat has enhanced the channel offering in Romania, including the addition of non-exclusive broadcasting rights for domestic football league. In Romania, competition also comes from DTH services offered by Telecom Romania, the incumbent telecommunications company, with 17% of the total television households.

Of the television households in the Czech Republic, Romania and Slovakia, 10%, 12% and 8%, respectively, subscribe to our video cable service. Our cable services are available to the television households in each of these countries as follows: 31% in the Czech Republic, 37% in Romania and 22% in Slovakia. In addition to its DTH services in Romania, Digi TV continues to overbuild large portions of our cable network with its own cable network. Of the television households in Romania, 37% subscribe to Digi TV's cable service. Telekom Romania is also expanding its FTTx network. Both of

these competitors offer quad-play bundles. UPC Czech competes with the incumbent telephone company's VDSL service and several other operators that provide DTH services and a number of local internet service providers (**ISPs**) that provide IPTV services over FTTx networks can reach approximately 65% of the households passed by our cable network in the Czech Republic. One of these companies is O2 Czech Republic, which has its own sports channel with exclusive rights in Multidimension and covers Champions Leaque, Czech football (soccer) and similar sporting events. In Slovakia, a number of ISPs make video services available to a majority of the homes passed by our cable networks. In particular, Slovak Telekom and Orange Slovensko a.s., a subsidiary of France Telecom S.A., have overbuilt homes passed by our cable network with their FTTx networks and offer triple-play packages through these networks.

FTA broadcasters are also significant competitors in the Czech Republic and in Slovakia. Subscribers in these countries tend to be more price sensitive than in other European markets. In particular, almost 100% of the Czech Republic can receive DTT for free or a comprehensive satellite service for a minimal recurring monthly fee. To address such sensitivity and meet competition, our operations in Central and Eastern Europe offer enhanced digital services, such as HD channel offerings and, in certain markets, MyPrime, Horizon Go and expanded VoD services. In addition, all of these operations have realigned their portfolio offers to include additional HD channels. These operations have also increased broadband internet speeds in their triple-play bundles ranging from up to 300 Mbps in the Czech Republic to 500 Mbps in Hungary, Romania and Slovakia. Promotional discounts are available, particularly on bundled options. Also, CI+ cards for DTH only products are available in the Czech Republic and in Slovakia.

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In Latin America, our principal competition is the provision of video services from DTH satellite providers, where we compete with established satellite platforms, as well as other pay television providers. Over-the-top viewing is also a competitive factor. To enhance the video offerings in both Chile and Puerto Rico, we are in the process of developing cloud-based, next generation user interfaces for these operations based on advanced technologies, including Horizon TV.

- VTR. In Chile, VTR is the largest cable television provider based on number of video cable subscribers. VTR's video cable services are available to approximately 60% of the Chilean television households and it serves 20% of the total television market in Chile. VTR competes primarily with DTH service providers in Chile, including the incumbent Chilean telecommunications operator Compañia de Telecomunicaciones de Chile SA using the brand name Movistar (Movistar), Claro Chile S.A., a subsidiary of América Móvil, S.A.B. de C.V. (Claro), and DIRECTV Latin America Holdings, Inc. (DirecTV). Movistar offers double-play and triple-play packages using DTH for video and DSL for internet and fixed-line telephony and offers mobile services. On a smaller scale, Movistar also offers IPTV services over FTTx networks in Chile. Claro offers triple-play packages using DTH and, in most major cities in Chile, through a hybrid fiber coaxial cable network. It also offers mobile services. To a lesser extent, VTR also competes with video services offered by or over networks of fixed-line telecommunication providers using DSL technology. Of the Chilean television households, 13%, 6% and 10% subscribe to the video services of Movistar, Claro and DirecTV Chile, respectively. To effectively compete, VTR offers VoD, catch-up television, DVR functionality, premium HD channels, pay-per-view, HD receivers and a variety of premium channels as value added services that can be purchased by VTR's video cable customers. These services and its variety of bundle options, including internet and telephony, enhance VTR's competitive position. In addition, in order to provide its customers greater viewing options, VTR intends to launch Horizon TV in 2016.
- Liberty Puerto Rico. Liberty Puerto Rico is the largest provider of video cable services in Puerto Rico and the third largest provider of video services in Puerto Rico. Its video cable service is available to approximately 87% of the television households in Puerto Rico and it serves 22% of the total television market in Puerto Rico. Liberty Puerto Rico's primary competition for video customers is from DTH satellite providers DirecTV and Dish Network Corporation. These competitors provide DTH satellite services to 27% and 25%, respectively, of the television households in Puerto Rico. Dish Network Corporation is an aggressive competitor, offering low introductory offers, free HD channels and, in its top tier packages, a multi-room DVR service for free. DirecTV is also a significant competitor offering similar programming in Puerto Rico compared to Dish Network. Additionally, Claro has launched an IPTV service, but it has not yet become a significant competitive factor. In order to compete, Liberty Puerto Rico has increased the number of its HD channels, launched a Spanish language tier, improved the functionality of its electronic program guide and expanded its VoD offerings. In 2015, Liberty Puerto Rico increased its internet speeds in its bundle offers with download speeds of up to 200 Mbps in its core bundles.

#### Internet

With respect to broadband internet services and online content, our businesses face competition in a rapidly evolving marketplace from incumbent and non-incumbent telecommunications companies, mobile operators and cable-based ISPs, many

of which have substantial resources. The internet services offered by these competitors include both fixed-line broadband internet services using DSL or FTTx and wireless broadband internet services, in a range of product offerings with varying speeds and pricing, as well as interactive services, data and other non-video services offered to homes and businesses. With technological developments, competition from wireless services using various advanced technologies has become significant. Recently, competitors have started offering high-speed mobile data via LTE wireless networks in certain of our markets. In addition, other wireless technologies, such as WiFi, are becoming more prevalent.

Our strategy is speed leadership, including increasing the maximum speed of our connections, offering varying tiers of service, prices and a variety of bundled product offerings and a range of value added services. We update our bundles and packages on an on-going basis to meet the needs of our customers, including offering download internet speeds of 120 Mbps or more at mass market price points. Ultra high-speed internet is also available in most markets, with speeds of up to 250 Mbps, with speeds of up to 500 Mbps available in Switzerland, Hungary, Romania and Slovakia. In early 2016, Virgin Media-Ireland, Unitymedia and VTR each increased their top tier speed to 360 Mbps, 400 Mbps and 160 Mbps, respectively. The focus continues to be on high-end internet products to safeguard our high-end customer base and allow us to become more aggressive at the low- and mediumend of the internet market. By fully utilizing the technical capabilities of Euro DOCSIS 3.0 technology, we can compete with local FTTx initiatives and create a competitive advantage compared to DSL infrastructures and LTE initiatives on a national level. With the expected commercial deployment of Euro DOCSIS 3.1 in late 2016, we plan to further increase our high-speed internet offers.

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Across Europe, our key competition in this product market is from the offering of broadband internet products using various DSL-based technologies by the incumbent phone companies and third parties. The introduction of cheaper and ever faster fixed-line broadband offerings is further increasing the competitive pressure in this market. Wireless broadband services, such as LTE, are also taking a foothold in a number of countries using high-speed mobile networks.

<u>United Kingdom and Ireland</u>. In the U.K., we have a number of significant competitors in the market for broadband internet services. Of these broadband internet providers, BT is the largest, serving 34% of the total market in the U.K. Virgin Media serves 20% of the total broadband market in the U.K. BT provides broadband internet access services over its own, VDSL network, which is available to approximately 85% of the U.K. population. BT Openreach, a division of BT, manages BT's local access network and provides competitors access to BT's networks. BT has announced its intention to rollout ultrafast speeds of up to 300 Mbps to 500 Mbps by the end of 2020 to up to 10.0 million premises using G-fast technology, a DSL standard designed for local loops less than 250 meters. This technology is also expected to eventually support a rollout of 1 Gbps service.

Operators such as Sky, TalkTalk and EE deploy their own network access equipment in BT exchanges via a process known as local loop unbundling (**LLU**). This allows an operator to reduce the recurring operating costs charged by BT by reducing the proportion of traffic that must travel directly over BT's network. LLU deployment requires a substantial capital investment to implement and requires a large customer base to deliver a return on investment. In addition to the competition and pricing pressure in the broadband market arising from LLU, competition from mobile broadband developments, such as LTE mobile services and WiFi services, is increasing.

Virgin Media-U.K. is expanding its ultra high-speed services and increasing its download speeds to up to 200 Mbps throughout its footprint. Virgin Media-U.K. offers its internet service on a standalone basis or through bundled offerings that include video, fixed-line telephony and mobile voice and data services at attractive price points. Promotional discounts are available for new customers.

Mobile providers have gained market share throughout Europe. In Ireland, mobile telephony providers Vodafone Ireland, Three Ireland (a subsidiary of CK Hutchison Holding Ltd) and Meteor Mobile Communications Limited, a subsidiary of Eir, offer a range of mobile internet products at competitive prices. Outside of mobile internet, Virgin Media-Ireland's most significant competitor is also Eir, the fixed-line incumbent, with 39% of the broadband internet market in Ireland. Eir offers download speeds of up to 100 Mbps through its expanded VDSL network, which passes approximately 1.4 million homes. In addition, as part of its bundle offers, Eir makes available download speeds of up to 1 Gbps in select markets, covering less than 2% of Irish homes, but plans to expand this service. Virgin Media's share of total broadband internet subscribers in Ireland is 32%. To compete effectively, Virgin Media-Ireland realigned its bundles, including increasing the download speed of its internet services to up to 240 Mbps in 2015 and to up to 360 Mbps at the start of 2016. It also introduced a SIM-only mobile product in late 2015 and expects to launch LTE in 2016.

Germany. In Germany, the competition for broadband internet services is particularly intense. For broadband internet access, DSL is the dominant technology and Deutsche Telekom is the primary provider. Other major competitors to our services are resellers of Deutsche Telekom's DSL and VDSL services, including United Internet AG and alternative network providers, such

as Vodafone Germany and Telefónica Germany Holding AG (**Telefónica Germany**). Deutsche Telekom provides services to 42% of the broadband internet subscribers in Germany through its network. United Internet AG and Vodafone Germany provide DSL services to 14% and 9%, respectively, of the broadband internet subscribers in Germany. We also face increased competition from mobile broadband operators, including Deutsche Telekom, Vodafone Germany and Telefónica Germany, each of which offer mobile services through LTE wireless systems. Both Deutsche Telekom and Vodafone Germany are upgrading their mobile systems and increasing their coverage areas. Deutsche Telekom has started upgrading its VDSL network with vectoring technology to increase its speeds to up to 100 Mbps. It plans to have 80% of German households connected to this network by 2018. With its (vectored) VDSL expansion plan, competition from Deutsche Telekom will increase.

Unitymedia serves 10% of the total broadband internet market in Germany. To compete effectively, Unitymedia expanded its ultra high-speed internet services and increased its download speeds to up to 200 Mbps and, in February 2016, launched download speeds of up to 400 Mbps in over 40% of its footprint. These download speeds cannot be matched by DSL operators. Unitymedia offers its internet service on a standalone basis or together with fixed-line telephony at attractive rates and through bundled offerings that include digital video and fixed-line telephony. Unitymedia also offers mobile voice and data services.

The Netherlands. With high internet access penetration, competition in the Netherlands internet market is intense. We face competition primarily from KPN, one of the largest broadband internet providers, and to a lesser extent, the telecommunications company, Tele2 Netherlands Holding N.V., as well as operators using wholesale access on KPN's fixed network. KPN offers ultra high-speed internet services with download speeds of up to 500 Mbps on its FTTx network and up to 100 Mbps over its VDSL or FTTx network. KPN is the leading mobile broadband provider with its competitively priced mobile internet products and LTE services. KPN and other competitors in both fixed-line and wireless broadband internet services offer a range of services with varying speeds, as well as interactive computer based services, data and other non-video services. KPN serves 42% and Ziggo serves 43%, respectively, of the total broadband internet market in the Netherlands. To remain competitive, Ziggo seeks to increase the maximum speed of its connections, offers varying tiers of service, prices and bundled product offerings and a range of value added services. Ziggo is also expanding its mobile data services, including access to its Community Wifi. The bundle strategies include offering ultra high-speed internet with speeds of up to 200 Mbps to compete with KPN's VDSL and FTTx initiatives. Ziggo offers its internet service on a standalone basis or together with digital video or with digital video and fixed-line telephony as bundles. It also offers mobile voice and data services.

Belgium. In Belgium, internet access penetration is higher than in most European markets causing intense competition between the two primary broadband internet technologies, cable and DSL. In Flanders, Telenet is the leading provider of residential broadband internet services. Telenet's primary competitor is the DSL service provider Proximus. Proximus is an aggressive competitor targeting Telenet customers through quadruple-play offerings and a low-cost broadband service. Approximately 45% of Belgium's broadband internet subscribers use Proximus' DSL and VDSL service with download speeds up to 100 Mbps. Mobile internet use is increasing. Similar to its video services, Telenet will be facing competition in the provision of internet services from other providers who have access to Telenet's cable network. To compete, Telenet promotes its high-speed internet with multiple-play bundles, offering download speeds from 30 Mbps to 200 Mbps with all new bundled broadband internet customers receiving download speeds of at least 100 Mbps. Customers also have access to Telenet's extensive Community WiFi. Telenet provides broadband internet service to 38% of the broadband internet market in Belgium.

<u>UPC CHAT</u>. In Switzerland, Swisscom is the largest provider of broadband internet services, with an estimated market share of 54% of all broadband internet customers, and is our primary competitor. Swisscom internet customers have access to its video content free of charge through its internet portal. It is also expanding its FTTx network, through which it can offer download speeds of up to 1 Gbps offer to customers on its new FTTx network. Swisscom's FTTx network reaches approximately 1.0 million homes. The next significant competitor is Sunrise Communications AG with 9% of broadband internet customers. Through third-party FTTx networks, Sunrise Communications AG offers download speeds of up to 100 Mbps, as well as a 1 Gbps offer for its high-end customers. In Switzerland, UPC CHAT serves 21% of the broadband internet subscribers. It offers download speeds of up to 200 Mbps and, for its Horizon TV subscribers, up to 500 Mbps. The internet service is available either on a standalone basis or through a bundle offer. UPC CHAT seeks to distinguish itself through competitively priced bundled offerings, including digital video, fixed-line telephony services and its ultra high-speed internet services. It is also expanding its Community WiFi network in Switzerland.

In Austria, UPC CHAT's largest competitor with respect to broadband internet services is the incumbent telecommunications company, Telekom Austria, with approximately 61% of the broadband internet subscribers in Austria. Telekom Austria is expanding its DSL network. It also plans to use G-fast technology and VDSL technology with vectoring to increase its download speeds. Currently, Telekom Austria offers download speeds of up to 30 Mbps and up to 100 Mbps in select areas. UPC CHAT's share of such market is 20%. The mobile broadband services of Telekom Austria are also a significant competitive factor. Telekom Austria is the largest mobile broadband provider serving 41% of the mobile broadband subscribers that use LTE services. In addition, UPC CHAT faces competition in Austria from LLU and other mobile broadband operators. As a result, the competition in the

broadband internet market is intense. Competitors in the Austrian broadband internet market are focusing on speed and pricing to attract customers. UPC CHAT uses its ultra high-speed internet services with access to Community WiFi and competitively priced bundles to encourage customers from other providers to switch to its services in Austria. It also offers promotional discounts and, in 2015, launched a portfolio of mobile voice and data services.

Central and Eastern Europe. In Central and Eastern Europe, our principal competitors are DSL operators and cable companies that are overbuilding our cable network. In Poland, our principal competitors are Orange Poland, Multimedia Polska S.A. and Vectra S.A., with top download speed offers ranging from up to 100 Mbps to 500 Mbps in parts of UPC Poland's footprint. In Hungary, the primary competitors are the incumbent telecommunications company, Magyar Telekom and Digi TV. Where Digi TV's cable is available, its download speeds range from 100 Mbps to 1 Gbps for its top tier of service. In addition, in all of our Central and Eastern European operations we face increased competition from mobile broadband operators. Download speeds are also a competitive factor, with competitors enhancing their networks to increase their available download speeds. In this competitive environment, we are using our ultra high-speed internet service to attract and retain customers. In addition, promotional discounts are a big part of our internet service offerings, as well as with our competitors.

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Chile. In Chile, VTR faces competition primarily from the non-cable-based internet service providers, such as Movistar, and from other cable-based providers, such as Claro. VTR is experiencing increased pricing and download speed pressure from Movistar and Claro and more effective competition from these companies with the bundle of their internet service with other services. Movistar offers ultra high-speed internet services with download speeds of up to 150 Mbps over portions of its DSL network. Mobile broadband competition is significant as well. Both Movistar and Claro have launched an LTE network for high-speed mobile data. Movistar is also the leading mobile broadband provider with its competitively priced mobile internet products and LTE services. Movistar serves 40% and VTR serves 37%, respectively, of the total broadband internet market in Chile. To compete effectively, VTR is expanding its two-way coverage and offering attractive bundling with fixed-line telephony and digital video service. In response to the availability of mobile data in Chile, VTR offers its high-speed internet with download speeds of up to 120 Mbps and up to 160 Mbps in early 2016.

<u>Puerto Rico</u>. In Puerto Rico, Liberty Puerto Rico competes primarily with mobile broadband providers. Most of these providers, including the incumbent telecommunications company, offer these services over their LTE networks. To compete with mobile broadband, Liberty Puerto Rico offers its high-speed internet with download speeds of up to 200 Mbps. Liberty Puerto Rico also competes with the DSL services of Claro in providing fixed-line internet services.

#### Fixed-Line Telephony and Mobile Services

The market for fixed-line telephony services is mature. Changes in market share are driven by the combination of price and quality of services provided and the inclusion of telephony services in bundled offerings. With respect to fixed-line telephony services, our businesses compete against the incumbent telecommunications operator in each country. These operators have substantially more experience in providing fixed-line telephony and mobile services, greater resources to devote to the provision of fixed-line telephony services and long-standing customer relationships. In addition, we compete with other VoIP operators offering service across broadband lines and with mobile telephony providers, many of whom offer LTE services and are making significant advances in obtaining customers. Over-the-top telephony is also becoming a competitive factor. In many countries, our businesses also face competition from other cable telephony providers, FTTx-based providers or other indirect access providers.

Competition in both the residential and business fixed-line telephony markets is extremely competitive due to market trends, the offering of carrier pre-select services, number portability, the replacement of fixed-line with mobile telephony and the growth of VoIP services, as well as continued deregulation of telephony markets and other regulatory action, such as general price competition. Carrier pre-select allows the end user to choose the voice services of operators other than the incumbent while using the incumbent's network. Our telephony strategy is based on value leadership. In most of our countries we offer our telephony services as "anytime" or "any destination". In addition, we provide product innovation, such as telephone apps that allow customers to make and receive calls from their fixed-line call packages on smart phones. We also offer varying plans to meet customer needs and use our telephony bundle options, as well as our bundle service options with our digital video and internet services, to help promote our telephony services. In addition, we offer mobile voice and data services in the U.K., Germany, the Netherlands, Belgium, Switzerland, Austria, Chile, Poland, Hungary and Ireland. With consumers increasingly moving towards mobile services, we continue to explore opportunities to offer mobile services in our other operations and mobility applications to our other services.

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Across Europe, our fixed-line and mobile telephony businesses are generally small compared to the existing business of the incumbent telephone company. The incumbent telephone companies remain our key competitors but mobile operators and other VoIP operators offering service across broadband lines are also significant competitors in these markets. Generally, we expect telephony markets to remain extremely competitive.

Our fixed-line telephony strategy in Europe is focused around value leadership, and we position our services as "anytime" or "any destination". Our portfolio of calling plans include a variety of options designed to meet the needs of our subscribers. Such options include unlimited network, national or international calling, unlimited off-peak calling and minute packages, including calls to fixed and mobile phones. We also use our bundled offerings to help promote our telephony services.

In the U.K., we compete primarily with BT in providing fixed-line telephony services to residential customers in the U.K. BT occupies an established market position as the former state provider. We also compete with other telecommunications companies that provide fixed-line telephony services directly, through LLU, or indirectly. These include TalkTalk and Sky and mobile telephone operators, such as EE and Vodafone who lease access to BT's network to operate their LTE services. In addition, we face competition from companies offering VoIP services using the customer's existing broadband, mobile data and WiFi connections. For our mobile service in the U.K., we also face competition from these mobile network operators as well as other MVNOs. EE is the largest mobile service provider in terms of the number of mobile subscribers in the U.K. Its U.K. network reaches 98% of the U.K. population with further expansion expected in 2016. Virgin Media is responding to such competition through innovative calling plans and a WiFi application that allows customers to use their fixed-line call packages on smart phones. It offers flexible mobile service contracts that allow customers to change services monthly and has increased its WiFi access points. Virgin Media's share of the fixed-line telephony market in the U.K. is 15%.

Deutsche Telekom is the dominant fixed-line telephony provider in Germany; however, telephony services provided through alternative technologies and mobile telephony services have caused competition in the telephony market to be intense. As a result, the market for residential telephony service is price sensitive. In recent years, fixed-line phone calls have been transformed into a commodity and have become increasingly dependent on a quality broadband offering, as phone is increasingly bundled with broadband internet services. Fixed-line telephony has experienced significant price erosion over the last few years, with operators increasingly offering flat-rate products. We seek to compete based on the speed of our network connections, pricing and product innovation. We also offer varying plans to meet customer needs and various bundled service options with our digital video and broadband internet services. The market share of the fixed-line telephony market for Unitymedia is 8%.

In the Netherlands, KPN is the dominant fixed-line telephony provider and expanded its mobile services with its LTE network, which is available throughout the Netherlands. All of the large multiple system operators, including Ziggo, as well as ISPs, offer VoIP services. Ziggo entered the mobile market as an MVNO in September 2013. The market share of the fixed-line telephony market for Ziggo is 38% compared to 51% for KPN. In the mobile market, Ziggo is small compared to the competition with less than 1% of the market.

In Belgium, competition in providing fixed-line residential telephony service is intense, with providers introducing substantial price reductions over the years. Proximus is the dominant fixed-line telephony provider with 63% of the fixed-line telephony market. It is also a significant competitor in the mobile telephony market, with its LTE services. Although Proximus is a significant competitor, it also provides certain services to Telenet's customers, including number portability and connect calls by Telenet customers to Proximus customers. To gain market share, Telenet emphasizes customer service and provides innovative plans to meet the needs of its customers, such as a flat fee plan offered in our bundle options (free off-peak calls to fixed-lines in Belgium, plus 2,000 minutes for calls to mobile in Belgium, fixed and mobile in Europe, the U.S. and Canada, and fixed in Morocco and Turkey). Subscribers to its fixed-line telephony service may also make free off-peak calls to mobile lines in Belgium, Europe, the U.S. and Canada. Telenet also offers competitively priced mobile telephony that include a wealth of voice minutes, text messages and mobile data. Telenet competes with other fixed-line operators and with mobile operators, including Proximus, in the provision of telephony and mobile services in Belgium. Telenet's share of the fixed-line telephony market in Belgium is 26%.

In Switzerland, Swisscom is the dominant fixed-line telephony service provider. Sunrise Communications AG, which offers carrier pre-select services, is also a strong competitor. Each of these competitors also operate their own mobile telephony service and include their mobile products in bundles with fixed-line services. In Switzerland, we serve our subscribers with VoIP over our cable network, and in Austria, we serve our subscribers with VoIP over our cable network, circuit-switched telephony services and DSL technology service over LLU. To meet the competition for fixed-line services in Switzerland, UPC CHAT enhanced its portfolio with attractive bundle options as well as standalone plans with free minutes either nationally or internationally and offers mobile services, including a phone app that allows smart phone users make calls on their fixed network plan. The market share of the fixed-line telephony market for UPC CHAT in Switzerland is 12%.

In our other European markets, the incumbent telephone companies dominate the telephony market. Most of the fixed-line competition to the incumbent telephone operators in these countries is from entities that provide carrier pre-select or wholesale line rental services. We also compete with ISPs that offer VoIP services and mobile operators. Given the increased relevance of the mobile market, we recently launched mobile services as an MVNO in Austria and Hungary and plan to expand our MVNO services to our other markets. To gain market share, we promote our VoIP telephony service offerings in almost all of our European markets and, in some markets, we have enhanced our telephony services through unlimited calling options.

### LiLAC Group

In Chile, VTR faces competition from the incumbent telecommunications operator, Movistar, and other telecommunications operators. Movistar has substantial experience in providing telephony services, resources to devote to the provision of telephony services and long-standing customer relationships. Competition in both the residential and business telephony markets is increasing as a result of market trends and regulatory changes affecting general price competition, number portability and the growth of VoIP services. VTR offers circuit-switched and VoIP telephony services over its cable network. VTR's share of the residential and commercial fixed-line telephony market in Chile is 20%.

In Chile, over 60% of telecommunications consumers use a mobile service, prompting us in 2012 to add wireless plans to our services. Claro, Movistar and Entel PCS Telecommunications SA are the primary companies that offer mobile telephony in Chile. Competition in the Chilean mobile services market is intense. As an MVNO, VTR offers its mobile telephony services on a standalone basis. To attract and retain customers, VTR focuses on its fixed-line telephony customer base, offering them postpaid accounts at an attractive price. In mid-2015, WOM S.A. entered the mobile services market through its acquisition of the Nextel Chile network. WOM S.A. is exerting significant competitive pressure in the mobile market with its very aggressive and attractive price offer. Such pricing is driving down sales and increasing churn in the mobile market. The mobile services of VTR represent less than 1% of the mobile telephony market in Chile, of which approximately 91% are postpaid accounts. Of these customers 78% subscribe to at least one fixed-line VTR service.

### **Regulatory Matters**

#### **Overview**

Video distribution, broadband internet, fixed-line telephony and mobile businesses are regulated in each of the countries in which we operate. The scope of regulation varies from country to country, although in some significant respects regulation in European markets is harmonized under the regulatory structure of the EU.

Adverse regulatory developments could subject our businesses to a number of risks. Regulation, including conditions imposed on us by competition or other authorities as a requirement to close acquisitions or dispositions, could limit growth, revenue and the number and types of services offered and could lead to increased operating costs and property and equipment additions. In addition, regulation may restrict our operations and subject them to further competitive pressure, including pricing restrictions, interconnect and other access obligations, and restrictions or controls on content, including content provided by third parties. Failure to comply with current or future regulation could expose our businesses to various penalties.

# Liberty Global Group

Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the U.K. are the Member States of the EU. As such, these countries are required to harmonize certain of their laws with certain EU rules. In addition, other EU rules are directly enforceable in those countries without any implementation at the national level. Certain EU rules are also applicable across the European Economic Area, whose Member States are the EU Member States (excluding Croatia) as well as Iceland, Liechtenstein and Norway.

In the broadcasting and communications sectors, there has been extensive EU-level legislative action. As a result, most of the markets in Europe in which our businesses operate have been significantly affected by the regulatory framework that has been developed by the EU. Regulation in Switzerland, which is not a Member State of the EU and is not part of the European Economic Area, is discussed separately below, as well as regulation in certain Member States in which we face regulatory issues that may have a material impact on our business.

#### EU Communications Regulation

The body of EU law that deals with communications regulation consists of a variety of legal instruments and policies (collectively, the **Regulatory Framework**). The key elements of the Regulatory Framework are various legal measures, which we refer to as the "**Directives**", that require Member States to harmonize their laws, as well as regulations that have direct effect without any specific adoption at the national level.

The Regulatory Framework primarily seeks open communications services markets within Europe. It harmonizes the rules within the EU for the establishment and operation of electronic communications networks, including cable television and traditional telephony networks, and the offer of electronic communications services, such as telephony, internet and, to some degree, television services.

On December 18, 2009, the Official Journal of the EU published revisions to the Regulatory Framework. These revisions should have been transposed into the laws of the Member States before May 25, 2011, although in practice, this process is still ongoing in certain Member States. Despite their limited nature, certain changes to the Regulatory Framework will affect us. For example, some new powers have been given to national regulators, such as the right to mandate access to ducts without finding operators or service providers to have "Significant Market Power" (defined below). This power, in particular, could require us to open our ducts to competitors and not allow us to make use of all capacity in our ducts for our own needs, or could mean we get access to ducts of third parties instead of building our own ducts. Additionally, the revisions to the Regulatory Framework grant enhanced powers to Member States to impose transparency obligations and quality of service requirements on ISPs, which may restrict our flexibility in respect of our broadband services.

Certain key provisions included in the current Regulatory Framework are set forth below. This description is not intended to be a comprehensive description of all regulation in this area.

- Licensing and Exclusivity. The Regulatory Framework requires Member States to abolish exclusivities on communication
  networks and services in their territory and allow operators into their markets based on a simple registration. The
  Regulatory Framework sets forth an exhaustive list of conditions that may be imposed on communication networks and
  services. Possible obligations include, among other things, financial charges for universal service or for the costs of
  regulation, environmental requirements, data privacy and other consumer protection rules, "must carry" obligations,
  provision of customer information to law enforcement agencies and access obligations.
- Significant Market Power. Certain of the obligations allowed by the Regulatory Framework apply only to operators or
  service providers with "Significant Market Power" in a relevant market. For example, the provisions of the Access
  Directive allow EU Member States to mandate certain access obligations only for those operators and service providers
  that are deemed to have Significant Market Power. For purposes of the Regulatory Framework, an operator or service
  provider will be deemed to have Significant Market Power where, either individually or jointly with others, it enjoys a
  position of significant economic strength affording it the power to behave to an appreciable extent independently of
  competitors, customers and consumers.

As part of the implementation of certain provisions of the Regulatory Framework, each Member State's National Regulatory Authority (NRA) is required to analyze certain markets predefined by the EU Commission to determine if any operator or service provider has Significant Market Power. The EU Commission has currently recommended that there be four such predefined markets, which is subject to periodic review. NRAs might, however, continue to maintain their analysis of some of the markets from the previous list or perform analysis of markets not listed in the recommendation, which requires the NRA to prove that additional requirements, the so called three-criteria test, are met.

NRAs might seek to define us as having Significant Market Power in any of these predefined markets or they may define and analyze additional markets. In the event that we are found to have Significant Market Power in any particular market, an NRA could impose certain conditions on us. Under the Regulatory Framework, the EU Commission has the power to veto a finding by an NRA of Significant Market Power (or the absence thereof), which power also applies with respect to market definition, in any market, regardless of whether it is a market predefined by the EU Commission or an additional market defined by an NRA. We have been found to have Significant Market Power in certain markets in which we operate and further findings of Significant Market Power are possible. In particular, we have been found to have Significant Market Power in the termination of calls on our network.

Video Services. The regulation of distribution, but not the content, of television services to the public is harmonized by
the Regulatory Framework. Member States are allowed to impose on certain operators under their jurisdiction reasonable
must carry obligations for the transmission of specified radio and television broadcast channels. Such obligations are
required to be based on clearly defined general interest objectives, proportionate and transparent and subject to periodic

review. We are subject to must carry regulations in all European markets in which we operate. In some cases, these obligations go beyond what we believe is allowable under the Regulatory Framework. To date, the EU Commission has taken very limited steps to enforce EU law in this area, leaving must carry obligations intact in certain Member States that are in excess of what we believe to be allowed, and we do not expect the EU Commission or the Member States to curtail such obligations in the foreseeable future.

• Net Neutrality/Traffic Management. In October 2015, the European Parliament adopted the Regulation on the first EU-wide net neutrality regime. The Regulation, which is directly applicable in all Member States beginning on April 30, 2016, permits the provision of specialized services, optimized for specific content, and subjects operators to reasonable traffic management requirements. The Regulation also abolishes roaming tariffs beginning in June 2017 and provides for a transitional period beginning in April 2016. We expect that the Body of European Regulators for Electronic Communications (BEREC) will issue guidelines in the second half of 2016.

On May 6, 2015, the EU Commission published its Digital Single Market strategy document. The strategy is an aggregation of many different policy areas with the purpose of creating a digital single market to expand jobs and stimulate growth. The strategy includes policy review in the areas of EU communications regulation, broadcasting law, copyright reform and anti-competitive geo-blocking practices.

The first legislative proposal under the strategy was adopted in December 2015 with publication of a proposed Regulation to address the portability of online audiovisual content services. Under the proposal, providers of online audiovisual content services must allow subscribers who are temporarily present in any EU Member State to access and use those services. The intention of the proposed Regulation is for subscribers to be able to enjoy the same out-of-home service in another Member State. Political negotiations on the draft Regulation will take place during 2016, and we expect the Regulation to be adopted by in EU Member States in early 2017.

## EU Broadcasting Law

Although the distribution of video channels by a cable operator is within the scope of the Regulatory Framework, the activities of a broadcaster are harmonized by other elements of EU law, in particular the Audiovisual Media Services Directive (AVMS). Generally, broadcasts originating in and intended for reception within an EU Member State must respect the laws of that Member State. Pursuant to AVMS, however, EU Member States are required to allow broadcast signals of broadcasters established in another EU Member State to be freely transmitted within their territory, so long as the broadcaster complies with the law of their home state. This is referred to as the country of origin principle. Under AVMS, the country of origin principle applies also to non-linear services, such as VoD. Accordingly, we should be able, if we so elect, to offer our own VoD services across the European Economic Area based on the regulation of the country of origin. As a result, we could structure our business to have a single regulatory regime for all of our VoD services offered in Europe. In addition, when we offer third-party VoD services on our network, it should be the business of the third-party, in its capacity as provider of the services, and not us as the local distributor, that is regulated in respect of these services.

Although Member States were obligated to transpose the requirements of AVMS into national law, and this has generally been completed, the practical effect is still not clear. Uncertainty still remains about the proper treatment of VoD from a practical perspective. Thus, there can be no assurance that the requirements for VoD will operate in the manner described above in any individual Member State. As a result, we may face inconsistent and uncertain regulation of our VoD services in Europe.

AVMS also establishes quotas for the transmission of European-produced programming and programs made by European producers who are independent of broadcasters.

# Other European Level Regulation

In addition to the industry-specific regimes discussed above, our European operating companies must comply with both specific and general legislation concerning, among other matters, data retention and electronic commerce. In December 2015, the EU General Data Protection Regulation (GDPR) was approved with respect to data protection and retention, enhances existing legal requirements, creates a multitude of new rules, and sets out stiff penalties for organizations that fail to comply. The GDPR will be directly applicable in all Member States commencing in 2018, harmonizing the patchwork of 28 national privacy regimes. This is seen as a major step forward in achieving a digital single market. In addition, following the adoption of the GDPR, the EU Commission announced a review of the e-Privacy Directive, which regulates privacy related issues in the electronic communications sector.

Our European operating companies are also subject to both national and European level regulations on competition and on consumer protection, which are broadly harmonized at the EU level. For example, while our operating companies may offer their

services in bundled packages in European markets, they are sometimes not permitted to make a subscription to one service, such as cable television, conditional upon a subscription to another service, such as telephony. They may also face restrictions on the degree to which they may discount certain products included in the bundled packages.

The EU Commission is imposing more mandatory requirements and encouraging voluntary solutions regarding energy consumption of the telecommunications equipment we provide our customers. We have been participating in discussions and studies regarding energy consumption with the EU Commission and with experts working on their behalf. In addition, we are working with suppliers of our digital set-top boxes to lower power consumption, as well as looking at possibilities through software to lower the power consumption of the existing fleet of digital set-top boxes. We also worked with a large group of companies to create a voluntary agreement on set-top box power consumption as an alternative to regulation. The EU Commission formally recognized this voluntary agreement as a valid alternative to regulation on November 22, 2012. Nevertheless, legislation in this area may be adopted that could adversely affect the cost and/or the functionality of equipment we deploy in customer homes.

Pursuant to a Regulation on standby power effective January 7, 2010 (the **Standby Regulation**), many devices are required to have either a low power standby mode or off mode, unless it is inappropriate to have either such mode on the device. For this purpose, our set-top boxes and certain other equipment are equipped with an off switch. Beginning in January 2013, the Standby Regulation imposed further requirements on power management on certain devices we purchase and/or develop. These devices, namely the Horizon TV set-top box and any future set-top boxes, must comply with such requirements, unless it can be argued such requirements are inappropriate. These additional requirements have necessitated additional software developments for our equipment and reduce the functionality of our equipment, assuming the equipment's default setting is maintained.

Furthermore in August 2013, the EU Commission issued an amendment to the Standby Regulation called Networked Standby (No 801/2013), which became effective as of January 1, 2015, with the aim of regulating, among others, the maximum power consumption of networked consumer equipment while in the so-called Networked Standby mode. As is the case with the Standby Regulation, these additional requirements may have an impact on our costs and the customer experience.

As part of the EU's Radio Spectrum Policy Program, spectrum made available through the switch off of analog television has been approved for mobile broadband use beginning January 1, 2013. This spectrum, known as the "digital dividend", is in the 700 - 862 MHz band. The terms under which this spectrum will become available will vary among the European countries in which we operate. Certain uses of this spectrum may interfere with services carried on our cable networks. If this occurs, we may need to: (1) avoid using certain frequencies on our cable networks for certain or all of our services, (2) make some changes to our networks, or (3) change the equipment that we deploy. In approving mobile broadband, however, the Radio Spectrum Policy Program states that the new mobile services must co-exist with existing services, such as cable and DTT, to avoid harmful interference. As a result, we are in on-going discussions with relevant Member States and the EU Commission to be included in LTE mobile trials in order to develop mitigation techniques and to engage NRAs to launch regulatory dialogs with equipment manufacturers and mobile operators to develop co-existing networks. We have also requested Member States and the EU Commission to prepare comprehensive national impact assessments when spectrum conditions are changed to ensure that the costs to prevent interference between the various services are balanced.

### United Kingdom

In the U.K., the Regulatory Framework is implemented through (1) the Communications Act 2003, which regulates all forms of communications technology, whether used for telecommunications or broadcasting, and (2) the Wireless Telegraphy Act 2006, which regulates radio communications in the U.K. (including spectrum, licensing arrangements, usage conditions and charges, license bidding and trading and enforcement and penalties). In addition, the Privacy and Electronic Communications Regulations 2003, as amended, implemented EU Directive 2002/58, which regulates the processing of personal data and the protection of privacy in the electronic communications sector.

Telecommunications companies in the U.K., including Virgin Media, are also subject to regulation under the U.K. Broadcasting Acts 1990 and 1996 and other U.K. statutes and subordinate legislation, including the Competition Act 1998 and the Enterprise Act 2002. The U.K. Office of Communications (**Ofcom**) regulates on-demand programming, which is derived from the EU Audiovisual Media Services Directive.

Ofcom is the key regulatory authority for the communications sector in which Virgin Media operates. It is responsible for furthering the interests of citizens in relation to communications matters and furthering the interests of consumers in relevant markets where appropriate by promoting competition. The Competition and Markets Authority also has jurisdiction with respect to competition matters.

<u>Broadband Expansion</u>. The U.K. government is attempting to drive the provision of super-fast broadband to 95% of the population of the U.K. by 2017 using money from the publicly funded BBC Licence Fee, under-spend from the Analogue TV Switch-Off Project and other sources of public investment to stimulate private investment. In addition, the U.K. government has

announced that everyone will, by 2020, have a legal right to request a broadband connection of at least 10 Mbps, regardless of where they live. The U.K. government intends to achieve this by introducing a broadband Universal Service Obligation (USO) and it is aimed, in particular, at addressing the final 5% of the population. Virgin Media is currently considering the implications of the USO and is working closely with the U.K. government to understand the plan.

<u>Television and VoD Services</u>. Following a review by Ofcom, Sky's Wholesale Must Offer (**WMO**) obligation, which regulates terms of the wholesale supply of Sky Sports 1 and 2 in SD and HD, has recently been removed. This has no impact on Virgin Media. The appeal of Ofcom's original decision to impose the remedy in 2010 has now been withdrawn by all parties. It is possible, however, that the new Ofcom decision removing the obligation could be appealed.

In November 2014, Ofcom opened an investigation into the arrangements by which the FA Premier League collectively sells the live U.K. audio-visual media rights to Premier League football (soccer) matches. Ofcom's investigation is on the basis that there are reasonable grounds to suspect that these arrangements appreciably restrict or distort competition in breach of the prohibition in Chapter I of the Competition Act of 1998 and/or Article 101(1) of the Treaty on the Functioning of the European Union. Ofcom is continuing its investigation, including undertaking further market research.

Strategic Review of Digital Communications. In March 2015, Ofcom launched a strategic review of U.K. digital communications, with the stated objective of ensuring that digital communications markets continue to work for consumers and businesses, with wide availability of high-quality services (both fixed and mobile). A "discussion document" was published in July 2015, inviting stakeholder comment and input. Key focus areas for Ofcom are: investment and innovation, delivering widespread availability of services; sustainable competition; empowering consumers; and, targeted regulation where necessary, deregulation elsewhere. Virgin Media responded to the 'discussion document' emphasizing the importance of investment for competition, innovation and consumer interest.

A key area of consideration is the future regulatory treatment of BT, in particular whether BT should be fully (structurally) separated, with the Openreach network division becoming a separate, independent company. An "emerging thinking" document is due to be published in late February 2016, setting out conclusions and any proposals for reform of the U.K. regime. This exercise would establish Ofcom 's policy positions going forward and will influence and inform the approach taken for future market reviews.

Ofcom Review of Business Connectivity Markets. Ofcom is in the process of reviewing the U.K. Business Connectivity Markets (leased lines and dedicated business connections, among others). BT has provisionally been found to hold Significant Market Power in certain markets, with consequential regulatory remedies proposed by Ofcom. Among these is a proposed obligation for BT to provide access to its dark fiber. Virgin Media, in common with a number of other investors in network (including BT), is opposed to this proposed remedy and is in the process of lobbying against it. Ofcom is expected to publish final conclusions in the spring of 2016.

Mobile Service. As an MVNO, Virgin Media is subject to EU regulations relating to retail prices for roaming services. These regulations set limits on certain wholesale and retail tariffs for international mobile voice roaming, SMS tariffs and data roaming within the EU, provides for greater levels of transparency of retail pricing information, imposes measures to guard against bill shock with respect to data roaming and sets maximum roaming rates within the EU. A new Regulation, effective June 2017, abolishes roaming tariffs in the EU (subject to addressing inconsistencies in underlying wholesale charges). A preceding transitional period has been established such that roaming surcharges will reduce significantly from April 2016.

Mobile termination charges applied by mobile network operators are regulated by Ofcom under a Significant Market Power charge control condition. Under Virgin Media's MVNO agreement, these changes in mobile termination charges are passed on to Virgin Media. Ofcom has set mobile termination charges for the period of 2015-2018, with rates reducing to approximately half of their starting levels by the end of this period. Virgin Media has experienced a reduction in revenue from such charges, although with some off-setting reductions in cost.

## Germany

Germany has incorporated the EU laws into national laws although under the German legal system competency is split between the Federal State (telecommunication law) and the German federal states (Bundesländer) (media law). The German Telecommunications Act broadly implemented the Regulatory Framework and covers the distribution of any signal by telecommunications networks encompassing television signals, internet data and telephony. The 2009 revisions to the Regulatory Framework by the EU were implemented by Germany in May 2012. The German Federal Network Agency (Bundesnetzagentur) is responsible *inter alia* for the regulation of the German telecommunications market. The Federal Cartel Office (the **FCO**), the national competition authority (Bundeskartellamt), plays an important role with respect to infrastructure and media regulation. The FCO has powers to address competition issues in all markets, although in some cases, competition issues will be addressed by the German Federal Network Agency.

Regulation of the media falls within the authority of the German federal states (Bundesländer). The media laws of all 16 federal states have been partially harmonized by the State Broadcasting Treaty (Rundfunkstaatsvertrag). The State Broadcasting Treaty establishes the main framework of the German regulation of broadcast. Nearly every German state has established its own independent regulatory body, the state media authority (Landesmedienanstalt) for the regulation of the private broadcasting sector. The state media authorities are primarily responsible for licensing and supervision of commercial broadcasters and the allocation of transmission capacities for radio and television channels. They also have authority with respect to the regulation of channel carriage fees, conditional access systems, interfaces, the bundling of programs and price regulation.

The allocation and use of analog cable transmission capacities for both radio and television channels in Germany is governed by the must carry rules of the respective German federal states. The allocation of digital transmission capacities for digital television and radio channels is primarily governed by the must carry rules of the State Broadcasting Treaty. The media law in the states of Baden-Württemberg, North Rhine-Westphalia and Hesse require Unitymedia to carry at least 13, 23 and 24 analog channels, respectively, and also limits Unitymedia's ability to convert these analog cable channels into digital channels.

The operation of conditional access systems for television services is governed by both the State Broadcasting Treaty and the German Telecommunications Act. Generally, operators must not unfairly obstruct or discriminate against broadcasters and other content providers through conditional access systems.

On December 15, 2011, the FCO approved our acquisition of the Unitymedia BW GmbH (formerly known as Kabel BW GmbH) (**KBW**) cable network in Germany (the **KBW Acquisition**), subject to our agreement with the following conditions:

- Unitymedia committed to the distribution of basic digital television channels (as opposed to channels marketed in premium subscription packages) on its entire network in unencrypted form. This commitment, with which we have complied, generally covers free-to-air television channels in SD and HD and is consistent with the practice that had been adopted by KBW prior to the KBW Acquisition. If, however, FTA television broadcasters request their HD content to be distributed in an encrypted HD package, the encryption of FTA HD channels is still possible. In addition, we made a commitment that, through December 31, 2016, the annual channel carriage fees Unitymedia receives for each such FTA television channel distributed in digital or simulcast in digital and analog would not exceed a specified annual amount, determined by applying the applicable rate card systems of Unitymedia as of January 1, 2012.
- Effective January 1, 2012, Unitymedia waived its exclusivity rights in access agreements with housing associations with
  respect to the usage of infrastructures other than its in-building distribution networks to provide television, broadband
  internet or telephony services within the building.
- Effective January 1, 2012, upon expiration of the minimum term of an access agreement with a housing association, Unitymedia transferred the ownership rights to the in-building distribution network to the building owner or other party granting access. In addition, Unitymedia waived its right to remove its in-building distribution networks.
- A special early termination right was granted with respect to certain of Unitymedia's existing access agreements (the **Remedy HA Agreements**) with the largest housing associations that cover more than 800 dwelling units and which had a remaining term of more than three years as of December 15, 2011. The total number of dwelling units covered by the Remedy HA Agreements was approximately 340,000 as of December 15, 2011. The special termination right may be exercised on or before September 30 of each calendar year up to the expiration of the current contract term, with termination effective as of January 1 or July 1 of the following year. If the special termination right is exercised, compensation will be paid to partially reimburse Unitymedia for its unamortized investments in modernizing the in-building network based on an agreed formula. To the extent Unitymedia is successful in obtaining renewals of the Remedy HA Agreements, we expect that these renewed contracts will contain pricing and other provisions that are somewhat less favorable to Unitymedia than those in previous agreements.

#### The Netherlands

The Netherlands' electronic communications law broadly implements the Regulatory Framework. According to this electronic communications law, the Autoriteit Consument & Markt (**ACM**), the Netherlands NRA, was required to perform a market analysis to determine which, if any, operator or service provider has Significant Market Power. In December 2011, ACM completed a market assessment of the television market in the Netherlands, concluding that there were no grounds for regulation of that market. As a result, no new regulations relating to the television market may be proposed without a new analysis. In particular, ACM rejected previously filed requests from a number of providers to perform a new market analysis of the television market and this decision was upheld by the Dutch Supreme Administrative Court on November 5, 2012.

On August 5, 2013, ACM published its latest market analysis decision on call termination, which combines both the fixed termination market and the mobile termination market. The new tariffs became effective September 1, 2013, and apply for a three year period. The decision was appealed by various operators, including us, and on August 27, 2013, the Dutch Supreme Administrative Court decided in a preliminary decision that the decrease of cap charges should be less steep than ACM had initially determined. These revised tariffs apply until the Dutch Supreme Administrative Court arrives at a final decision in the appeal proceedings on the merits. This final decision is not expected before the end of 2016 because the Dutch Supreme Administrative Court ruled on October 15, 2014, that it wishes to pose prejudicial questions to the European Court of Justice.

On January 1, 2014, the revised must carry obligations became effective. The revised must carry obligations do not only apply to cable operators, as was previously the case, but also apply to all providers of analog and digital program packages based on the principle of technology neutrality. Providers of digital program packages with 100,000 or more subscribers are subject to the obligation to provide at least 30 television channels, including six public television broadcasting channels as a must carry obligation, a limited amount of regional and local television broadcasting channels and a number of digital radio broadcasting channels. In addition, all providers of analog program packages with 100,000 or more subscribers must include at least 15 television channels, including five public broadcasting channels as a must carry obligation, a limited amount of regional and local television broadcasting channels and some analog radio broadcasting channels. The Dutch Media Authority can grant a (conditional) exemption from the obligation if the must carry obligations listed above give rise to disproportionate costs for the network operator, an impediment to innovation or other unreasonable outcomes.

There is no regulated financing mechanism in place between network operators and broadcasters. Commercial and public program providers must negotiate with network operators regarding transmission fees.

In connection with the acquisition of the outstanding shares of Ziggo (the **Ziggo Acquisition**), we obtained regulatory clearance from the EU Commission on October 10, 2014. The clearance was conditioned upon our commitment to divest our Film1 channels to a third-party and to carry Film1 on our network in the Netherlands for a period of three years. On July 21, 2015, we sold our Film1 channels to Sony Pictures Television Networks. Under the terms of the agreement, all five *Film1* channels will continue to be carried on certain of our networks for a period of at least three years.

In July 2015, the Dutch incumbent telecommunications operator filed an appeal against the EU Commission regarding its decision to approve the Ziggo Acquisition. We are not a party to the appeal and we do not expect that the filing of this appeal will have any impact on the ongoing integration and development of our operations in the Netherlands.

Following the EU Commission's clearance of the Ziggo Acquisition, on October 31, 2014, ACM published as part of the fourth round of market analysis a draft of market analysis decision on LLU. In this draft decision, ACM found that there is a risk of joint dominance of KPN and Ziggo in the related retail broadband market, which would be remedied on the wholesale market for LLU where ACM found a risk of single dominance of KPN. This draft decision was subject to national consultation followed by notification to the EU Commission. The EU Commission issued serious doubts regarding the draft LLU decision, causing ACM to redraft their initial decision. After another national consultation in July 2015 and European notification in November 2015, ACM published the final decision on December 17, 2015. In the final decision, ACM no longer finds a risk of joint dominance for KPN and Ziggo at the retail level but still concludes that there is a risk of consumer harm due to prices being set above the competitive equilibrium. At the wholesale level, ACM concluded that Ziggo is not part of the relevant LLU market and that KPN is dominant on that market, and ACM imposed obligations on KPN only.

### Belgium

Belgium has broadly transposed the Regulatory Framework into law. According to the electronic communications law of June 13, 2005, the Belgisch Instituut voor Post en Telecommunicate (the **BIPT**), the Belgian NRA, should perform the market analysis to determine which, if any, operator or service provider has Significant Market Power. In addition, the Federal Parliament prepared legislation to transpose the 2009 revisions to the Regulatory Framework, which became effective as of August 4, 2012.

Telenet has been declared an operator with Significant Market Power on the market for call termination on an individual fixed public telephone network. Since April 1, 2012, reciprocal termination rates have been imposed, which results in Telenet charging the interconnection rate of the incumbent telecommunications operator, Proximus. On July 14, 2015, the BIPT published a draft decision regarding the wholesale tariffs for call termination on the public telephone network provided at a fixed location. The BIPT has organized a public consultation on this draft decision, which was open for reactions until September 15, 2015. This draft decision has not yet been submitted to the EU Commission for notification. A final decision is expected in 2016.

Although no determination has been made on whether Telenet has Significant Market Power on the market for call termination on individual mobile networks, its rates will be affected by rate limitations implemented by BIPT. In June 2010, BIPT imposed

a steep rate reduction that resulted in (1) an initial 45% decline effective August 1, 2010, over the then average rate and (2) a further decline in January 2013 that was approximately 79% less than the average rate implemented on August 1, 2010. As of January 1, 2013, mobile termination rates have been set by BIPT at €1.08 cents per minute, and to date, 2015 rates have not been set. On September 14, 2015, the BIPT published its draft decision on the relevant market for "call termination on individual mobile networks". Telenet, as an MVNO, has been designated in the draft decision as having Significant Market Power. In the draft decision, the BIPT adopts a bottom-up long run incremental cost model to calculate tariffs for call termination on individual mobile networks, resulting in a nominal value of €0.81 per minute in 2015 and a declining glide path up and until 2020. The BIPT organized public consultation on this draft decision, which was open until November 14, 2015. This draft decision has not yet been submitted to the EU Commission for notification. A final decision is expected in 2016.

In December 2010, the BIPT and the regional regulators for the media sectors (together, the **Belgium Regulatory Authorities**) published their respective draft decisions reflecting the results of their joint analysis of the broadcasting market in Belgium. The Belgium Regulatory Authorities adopted a final decision on July 1, 2011 (the **July 2011 Decision**) with some minor revisions. The regulatory obligations imposed by the July 2011 Decision include (1) an obligation to make a resale offer at "retail minus" of the cable analog package available to third-party operators (including Proximus), (2) an obligation to grant third-party operators (except Proximus) access to digital television platforms (including the basic digital video package) at "retail minus", and (3) an obligation to make a resale offer at "retail minus" of broadband internet access available to beneficiaries of the digital television access obligation that wish to offer bundles of digital video and broadband internet services to their customers (except Proximus).

In February 2012, Telenet submitted draft reference offers regarding the obligations described above, and the Belgium Regulatory Authorities published the final decision on September 9, 2013. Telenet has implemented the access obligations as described in its reference offers and, as of June 23, 2014, access to the Telenet network had become operational and can be applied by wireless operator Mobistar SA (**Mobistar**). In addition, as a result of the November 2014 decision by the Brussels Court of Appeal described below, on November 14, 2014, Proximus submitted a request to Telenet to commence access negotiations. Telenet contests this request and has asked the Belgium Regulatory Authorities to assess the reasonableness of the Proximus request. The timing for a decision regarding this assessment by the Belgium Regulatory Authorities is not known.

On December 14, 2015, the Belgium Regulatory Authorities published a draft decision, which amended previously-issued decisions, that sets forth the "retail-minus" tariffs of minus 26% for basic television (basic analog and digital video package) and minus 18% for the bundle of basic television and broadband internet services during an initial two-year period. Following this two-year period, the tariffs would change to minus 15% and 7%, respectively. The draft decision was notified to the European Commission and a final decision is expected in the first quarter of 2016. A "retail-minus" method of pricing involves a wholesale tariff calculated as the retail price for the offered service by Telenet, excluding VAT and copyrights, and further deducting the retail costs avoided by offering the wholesale service (such as costs for billing, franchise, consumer service, marketing and sales).

Telenet filed an appeal against the July 2011 Decision with the Brussels Court of Appeal. On November 12, 2014, the Brussels Court of Appeal rejected Telenet's appeal and accepted Proximus's claim that Proximus should be allowed access to Telenet's, among other operators, digital television platform and the resale of bundles of digital video and broadband internet services. On November 30, 2015, Telenet filed an appeal of this decision with the Supreme Court. Telenet and wireless operator Mobistar each filed an appeal with the Brussels Court of Appeal against the decision regarding the quantitative aspects of the reference offers. A decision with respect to these appeals is expected in 2016. There can be no certainty that Telenet's appeals will be successful.

The July 2011 Decision aims to, and in its application may, strengthen Telenet's competitors by granting them resale access to Telenet's network to offer competing products and services notwithstanding Telenet's substantial historical financial outlays in developing the infrastructure. In addition, any resale access granted to competitors could (1) limit the bandwidth available to Telenet to provide new or expanded products and services to the customers served by its network and (2) adversely impact Telenet's ability to maintain or increase its revenue and cash flows. The extent of any such adverse impacts ultimately will be dependent on the extent that competitors take advantage of the resale access ultimately afforded to Telenet's network and other competitive factors or market developments.

### Switzerland

Switzerland has a regulatory system which partially reflects the principles of the EU, but otherwise is distinct from the European regulatory system of telecommunications. The Telecommunications Act (Bundesgesetz über Radio und Fernsehen) regulates, in general, the transmission of information, including the transmission of radio and television signals. Most aspects of the distribution of radio and television, however, are regulated under the Radio and Television Act (Radio und Fernsehgesetz). In addition, the Competition Act and the Act on Price Surveillance are potentially relevant to our business. With respect to energy consumption of electronic home devices, the Energy Act and the revised Energy Ordinance have been applicable since January 2010 to television set-top boxes as described below.

Under the Telecommunications Act, any provider of telecommunications services needs to register with the Federal Office of Communications. Dominant providers have to grant access to their infrastructure to third parties, including LLU access. This access regulation, however, is restricted to the copper wire network of the incumbent, Swisscom. Therefore, such unbundling obligations do not apply to UPC CHAT in Switzerland and other cable operators. Also, any dominant provider has to grant access to its ducts, subject to sufficient capacity being available in the relevant duct. At this time, only Swisscom has been determined to be dominant in this regard. Dominant operators are obliged to provide interconnection and all providers of services forming part of the universal service in Switzerland have to ensure interoperability of services.

The Federal Council has suggested that the current Telecommunications Act be revised in two steps. First, the Federal Council plans to introduce measures to allow for easier access to the incumbent's network, better consumer protection (decreasing roaming fees, unbundling of products, measures to prevent spoofing) and a slight change to the regulatory regime (introducing partial exofficio rights for the Federal Communications Commission). Second, the Federal Council plans to introduce technology neutrality into the Telecommunications Act, as well as to further implement consumer and youth protection measures. Possibly, the topic of regulated net neutrality may be introduced in a second part of the revision. This second step is not expected to start before 2018. In addition, it is expected that the conditions for a national broadband rollout will be improved by introducing access obligations to the ducts of local utilities.

Under the Radio and Television Act and the corresponding ordinance, cable network operators are obliged to distribute certain programs that contribute in a particular manner to media diversity. The Federal Government and the Federal Office of Communications can select up to 25 programs that have to be distributed without the cable operator being entitled to compensation. In the past, these programs needed to be distributed in analog. A new Radio and Television ordinance became effective August 1, 2012, which allowed cable operators to decrease the number of obligatory channels to be broadcasted in analog. A departmental ordinance was published which eliminates this regime for all foreign broadcasters as of June 1, 2013, and all other such regulation as of January 1, 2015. Additionally, there is no legal obligation to broadcast digital and analog in parallel as long as the digital offer is comparable to analog and does not force customers to incur additional costs.

Up until the end of 2015, UPC CHAT's retail customer prices were subject to review by the Swiss Price Regulator. In October 2012, UPC CHAT announced an agreement with the Swiss Price Regulator pursuant to which UPC CHAT will make certain changes to its service offerings in Switzerland in exchange for progressive increases in the price of its basic cable connection. In this regard, (1) effective November 1, 2012, UPC CHAT began offering a basic tier of digital television channels on an unencrypted basis in its Switzerland footprint and (2) effective January 3, 2013, for video subscribers who pay the required upfront activation fee, UPC CHAT has made available, at no additional monthly charge, a 2 Mbps internet connection, which was an increase from the previously-offered 300 Kbps internet connection. In addition, the monthly price for a cable connection increased by CHF 0.90 (\$0.90) effective January 1, 2013 and a further increase of CHF 0.60 (\$0.60) took effect on January 1, 2014. During the course of 2015, negotiations with the price regulator led to a verdict to stop monitoring the prices of UPC CHAT in Switzerland. This decision was justified by the fact that by competition from Swisscom and Sunrise, there is competition for the TV end user.

Effective October 1, 2014, the Federal Council proposed a new regulation imposing power thresholds for set-top boxes. There are some exemptions and transition periods that apply in the short term to the set-top boxes we import into Switzerland. The Swiss regulation may not be in line with EU regulation, and it may be reconsidered as Switzerland tries to align itself with EU norms. If, however, such regulation remains in force, it may have an adverse effect on the business of UPC Cablecom as UPC Cablecom may face restrictions regarding the import of set-top boxes.

### LiLAC Group

Chile

VTR is subject to regulation and enforcement by various governmental entities in Chile including the Chilean Antitrust Authority, the Ministry of Transportation and Telecommunications (the **Ministry**) through the Chilean Undersecretary of Telecommunications (**SubTel**), the National Television Council (**CNTV**) and Chile's National Consumer Service (**Sernac**).

In addition to the specific regulations described below, VTR is subject to certain regulatory conditions which were imposed by the Chilean Antitrust Authority in connection with VTR's combination with Metrópolis Intercom SA in April 2005. These conditions are indefinite and include, among others, (1) prohibiting VTR and its control group from participating, directly or indirectly through a related person, in Chilean satellite or microwave television businesses, (2) prohibiting VTR from obtaining exclusive broadcast rights, except for specific events, and (3) requiring VTR to offer its broadband capacity for resale of internet services on a wholesale basis.

Video

The provision of pay television services requires a permit issued by the Ministry. Cable pay television permits are granted for an indefinite term and are non-exclusive. As such permits do not involve radioelectric spectrum, they are granted without ongoing duties or royalties. VTR has permits to provide cable pay television services in the major cities, including Santiago, and in most of the medium-sized markets in Chile.

Cable television service providers in Chile are free to define the channels and content included in their services and are not required to carry any specific programming, except as described below. However, CNTV may impose sanctions on providers who are found to have run programming containing excessive violence, pornography or other objectionable content. Pay television operators are directly responsible for violation of such prohibitions. Additionally, the Television Act requires pay television operators to offer a certain quota of cultural content and to distribute public interest campaigns.

The Television Act has been recently amended to establish a retransmission consent regime between broadcast television concessionaires and pay television operators. This regime provides that once a broadcast operator achieves digital coverage of 85% of the population within its concession areas, the broadcast operator may require that pay television operators enter into an agreement for the retransmission of its digital signal. In addition, the Television Act requires that the technical or commercial conditions imposed by broadcast operators not discriminate among pay television operators. Also, the Television Act establishes a must carry regime requiring pay television operators to distribute up to four local broadcast television channels in each operating area. The channels that must be carried by any particular pay television operator are to be selected by CNTV.

The Chilean Consumer's Rights Protection Law contains provisions that have been interpreted by Sernac to require that any increase in rates exceeding inflation must be previously accepted and agreed to by subscribers. Although VTR disagrees with this interpretation, in July 2012, VTR reached an agreement with Sernac that permits VTR to make adjustments to its published rates twice per year to adjust for inflation. In addition, VTR may once a year propose to its existing subscribers additional changes to their rates. If a subscriber does not accept these proposed rate changes, the subscriber is permitted to terminate its subscription contract. In addition, the agreement with Sernac establishes the criteria upon which VTR may modify its channel line-up without the consent of subscribers.

#### Internet

In August 2010, a law on internet neutrality was passed, which prohibits "arbitrary blockings" of legal content, applications or services and the provision of differentiated service conditions according to the origin or ownership of the content or service provided through the internet. Additionally, the law authorizes ISPs to take measures to ensure the privacy of their users and provide virus protection and safety processes over their network, as long as these measures do not infringe antitrust laws. Additional measures were subsequently implemented, including obligations related to consumer information, traffic management policies applied by each ISP and internet quality of service requirements and notices required by law concerning the effective maximum and minimum traffic speeds offered under internet access plans.

In order to protect the constitutional rights of privacy and safety of communications, ISPs are prohibited from undertaking surveillance measures over data content on their networks. Also, special summary proceedings have been created in order to safeguard intellectual property rights against violations committed through networks or digital systems. These proceedings include measures designed to withdraw, disqualify or block infringing content in the ISP's network or systems. The law also provides for the right of intellectual property owners to judicially request from ISPs the delivery of necessary information to identify the provider of infringing content.

### Fixed-Line and Mobile Telephony Services

The provision of fixed-line and mobile telephony services requires a public telecommunications service concession. With respect to mobile services, in 2009, SubTel awarded VTR a license for 30 MHz of spectrum in the 1700/2100 MHz frequency band for the provision of wireless telephony services. The license has a 30-year renewable term. In 2012, VTR transferred this license to its affiliate VTR Wireless SpA (VTR Wireless) which is now a subsidiary of VTR known as VTR Comunicaciones SpA. On January 15, 2014, VTR Wireless received a letter from SubTel in which SubTel asserted that VTR Wireless is not in compliance with the terms of such wireless license. SubTel alleged that the terms of the wireless license require VTR Wireless to comply with certain minimum network coverage and traffic levels. VTR disagrees with SubTel's assertions regarding the terms of the wireless license and has contested such assertions vigorously.

VTR has concessions to provide fixed-line telephony in most major and medium-sized markets in Chile. Telephony concessions are non-exclusive and have renewable 30-year terms. The original term of VTR's fixed-line telephony concessions expires in November 2025. Long distance telephony services are considered intermediate telecommunications services and, as such, are also regulated by the Ministry. VTR has concessions to provide this service, which is non-exclusive, for a 30-year renewable term expiring in September 2025. In Chile, fixed-line telephony communications between primary zones within the country were, until

recently, domestic long distance calls. Then, on November 6, 2013, SubTel eliminated domestic long distance calls and in August 2014, it completed the process of unifying Chile into a single telephone service primary zone. We believe this new system may benefit VTR along with the Chilean fixed-line market as a whole in relation to VTR's mobile telephony competition. Fixed-line subscribers now have the ability to make phone calls throughout Chile without incurring long-distance charges, thereby making VTR's fixed-line telephony services more attractive.

There are no universal service obligations in Chile. However, local service concessionaires are obligated to provide telephony service to all customers that are within their service area or are willing to pay for an extension to receive service. All local service providers, including VTR, must give long distance telephony service providers equal access to their network connections at regulated prices and must interconnect with all other public services concessionaires whose systems are technically compatible.

As a general rule, fixed-line telephony service providers are free to establish the rates directly charged to their customers, unless the Chilean Antitrust Authority concludes that due to a lack of sufficient competition in the market, rates should be fixed by SubTel. However, SubTel sets the maximum rates that may be charged by each operator for interconnect charges, access charges between operators for calls originating on one network that are completed through connections with one or more networks of other providers, and charges for network unbundling services. Rate regulation on interconnection charges is applicable to all fixed-line and mobile telephony companies, including VTR. The determination of the maximum rates that may be charged by operators for their fixed-line or mobile services are made on a case-by-case basis by SubTel and are effective for five years. In September 2014, VTR received a tariff proposal from SubTel that would have retroactive effect to June 2012. In this regard, beginning in September 2014, various decreases to tariff rates have been proposed and implemented by Chilean regulatory authorities, and a further decrease to one tariff rate is pending. None of these decreases had, or are expected to have, a material impact on VTR's revenue or expenses.

### Other Chilean Regulation

- Bundling. On December 18, 2012, the Chilean Antitrust Authority issued its regulation governing the on-net/off-net pricing practice in the mobile telephone industry and the offering of bundled telecommunication services. Pursuant to the terms of this regulation, as revised by the Chilean Supreme Court, mobile services may be sold jointly with fixed-line services. However, promotional discounts were not permitted for these double-play offers. As for traditional bundling over the same platform (e.g., bundled fixed-line services such as our double- and triple-play packages, or bundled mobile services), this regulation provides that such services may be bundled, subject to certain price limitations. These limitations require that the total price for a bundle must be greater than the standalone price for the most expensive service included in the bundle. Also, when three or more services are bundled, the price for the bundle must be greater than the sum of the standalone prices for each service in the bundle, excluding the lowest priced service.
- Telecommunication Services Proposal. In February 2014, SubTel published a General Telecommunication Services
  Ruling that regulates the offer of telecommunication services, including voice, internet access, and pay television, either
  alone or in bundles, from a consumer protection point of view. The new regulation introduced service billing, significant
  changes in contracts with customers, new requirements regarding compensation in case of service failure, and new rules
  regarding treatment of customers' personal information.
- Minimum Standards on Quality of Service and Operation. From August 5 to September 4, 2013, SubTel submitted for public comment a draft of the Technical Fundamental Plan on Maintenance and Public Service Telecommunications Network Managing. This draft seeks to impose minimum standards on quality of service and operation of telecommunications networks, in general, and in some particular services: voice services; text and multimedia messages services; data transmission services; minimum coverage for mobile services; and digital terrestrial television minimum coverage. We are uncertain when SubTel will publish the final version of the plan.

#### Puerto Rico

We are subject to regulation in Puerto Rico by various governmental entities at the Puerto Rico and the United States federal level, including the FCC. The Puerto Rico Telecommunications Regulatory Board (**TRB**), which was established in 1996, has primary regulatory jurisdiction in Puerto Rico at the local level and is responsible for awarding franchises to cable operators for the provision of cable service in Puerto Rico and regulating cable television and telecommunications services.

Our business in Puerto Rico is subject to comprehensive regulation under the United States Communications Act of 1934, as amended (the **Communications Act**), which regulates communication, telecommunication and cable television services. The Communications Act also provides the general legal framework for, among other things, the installation, operation and provision of telephone services, services related to interconnection between telephone carriers, and television, radio, cable television and direct broadcast satellite, or DBS, services.

The FCC and/or the TRB have the authority to impose sanctions, including warnings, fines, license revocations and, in certain specific cases, termination of the franchise, although license revocation and franchise termination are rare. The Communications Act specifies causes for the termination of an operator's FCC license, including, for example, the failure to comply with license requirements and conditions or to pay fines or fees in a timely manner. Such sanctions can be appealed to, and reviewed by, the Puerto Rican courts and the United States federal courts.

In Puerto Rico, antitrust regulation is governed by the U.S. Sherman Act, other federal antitrust legislation, and the Puerto Rico Anti-Monopoly Law. In particular, the Sherman Act sets conditions to and approves certain business combinations and seeks to prevent anti-competitive practices, among other things. See note 17 to our consolidated financial statements. The Puerto Rico Anti-Monopoly Law substantially parallels the Sherman Act and authorizes the Puerto Rico Department of Justice to investigate and impose competition-related conditions on transactions.

Puerto Rico Law 5 of 1973, as amended, created the Puerto Rico Department of Consumer Affairs (**DACO**), which regulates marketing campaigns, publicity, and breach of service contracts, and prohibits false advertising. The Puerto Rico Telecommunications Act of 1996 (**Law 213**), which created the TRB, requires that rates for telecommunication services be cost-based, forbids cross-subsidies and focuses on encouraging, preserving and enforcing competition in the cable and telecommunications markets. Although Law 213 does not require us to obtain any approval of rate increases for cable television or telecommunication services, any such increases must be in compliance with Law 213's requirements, including prior *pro forma* notification to the TRB before such increases take effect.

The video, Internet and voice services that we provide are all subject to regulation:

• Video. The provision of cable television services requires a franchise issued by the TRB. Franchises are subject to termination proceedings in the event of a material breach or failure to comply with certain provisions set forth in the franchise agreement governing a franchisee's system operations, although such terminations are rare. In addition, franchises require payment of a franchise fee as a requirement to the grant of authority. Franchises establish comprehensive facilities and service requirements, as well as specific customer service standards and monetary penalties for non-compliance. Franchises are generally granted for fixed terms of up to ten years and must be periodically renewed.

Our pay television service is subject to, among other things, subscriber privacy regulations and must-carry and retransmission consent rights of broadcast stations. The Communications Act and FCC rules govern aspects of the carriage relationship between broadcast television stations and cable companies. To ensure that every qualifying local television station can be received in its local market without requiring a cable subscriber to switch between cable and off-air signals, the FCC allows every qualifying full-power television broadcast station to require that all local cable systems transmit that station's primary digital channel to their subscribers within the station's market (the "must carry" rule) pursuant to the Cable Television Consumer Protection and Competition Act of 1992. Alternatively, a station may elect every three years to forego its must carry rights and seek a negotiated agreement to establish the terms of its carriage by a local cable system, referred to as retransmission consent.

- Internet. We offer high-speed internet access throughout our entire footprint. In March 2015, the FCC issued an order classifying mass-market broadband internet access service as a "telecommunications service," changing its long-standing treatment of this offering as an "information service", which the FCC traditionally has subjected to limited regulation. The FCC adopted rules that prohibit, among other things, broadband providers from: (1) blocking access to lawful content, applications, services or non-harmful devices; (2) impairing or degrading lawful internet traffic on the basis of content, applications, services or non-harmful devices; and (3) favoring some lawful internet traffic over other lawful Internet traffic in exchange for consideration. In addition, the FCC adopted a rule prohibiting broadband providers from unreasonably interfering with users' ability to access lawful content or use devices that do not harm the network, or with edge providers' ability to disseminate their content. The FCC also imposed more detailed disclosure obligations on broadband providers than were previously in place, which were approved by the Office of Management and Budget in late 2015. The FCC's new rules are in effect, but have been challenged in the United States Court of Appeals for the District of Columbia Circuit. Oral argument has been heard and the court may rule at any time. We cannot predict how the court will rule or whether any further court proceedings will take place. The impact of these revised rules on our business, if they are ultimately sustained by the courts in whole or in part, is unclear.
- Voice Services. We offer voice services, including both circuit-switched telephony and VoIP. Our circuit-switched telephony services are subject to FCC and local regulations regarding the quality and technical aspects of service. All local telecommunications providers, including us, are obligated to provide telephony service to all customers within the service area, subject to certain exceptions under FCC rules and regulations, and must give long distance telephony service providers equal access to their network. Under the Communications Act, competitive local exchange carriers (CLECs), like us, may require interconnection with the incumbent local exchange carrier (ILEC), and the ILEC must negotiate a

reasonable and nondiscriminatory interconnection agreement with the CLEC. Such arrangement requires the ILEC to interconnect with the CLEC at any technically feasible point within the ILEC's network, provide access to unbundled network elements (UNE) of the ILEC's network, offer for resale at wholesale rates any telecommunication services the ILEC provides to its own retail clients, and allow physical collocation of the CLEC's equipment in the ILEC's facilities to permit interconnection or access to UNE services. Therefore, we have the right to interconnect with the incumbent local exchange carrier, PRT. We have negotiated an interconnection agreement with PRT, and the technical process leading to physical interconnection is underway between personnel of both companies.

All of our circuit-switched telephony and VoIP services are subject to a charge for the Federal Universal Service Fund (USF), which is a fund created under the Communications Act to subsidize telecommunications services in high-cost areas, to provide telecommunications services for low-income consumers, and to provide certain subsidies for schools, libraries and rural healthcare facilities. The FCC has redirected the USF to support broadband deployment in high-cost areas. In addition, our circuit-switched telephony and VoIP services are subject to a charge for a local Puerto Rico Universal Service Fund, which was created by law to subsidize telecommunications services for low-income families under the Federal USF Lifeline and Link-Up programs.

The FCC has adopted other regulations for VoIP services, including the requirement that interconnected VoIP providers and facilities-based broadband internet access providers must comply with the Communications Assistance for Law Enforcement Act, which requires carriers to provide certain assistance to federal law enforcement authorities. VoIP providers are also required to offer basic and enhanced 911 emergency calling services, which requires disclosure to all VoIP customers. VoIP providers are also subject to federal customer proprietary network information rules related to customer privacy.

#### **Employees**

As of December 31, 2015, we, including our consolidated subsidiaries, had an aggregate of approximately 37,000 full-time equivalent employees, certain of whom belong to organized unions and works councils. Certain of our subsidiaries also use contract and temporary employees, which are not included in this number, for various projects. We believe that our employee relations are good.

### **Financial Information About Geographic Areas**

Financial information related to the geographic areas in which we do business appears in note 18 to our consolidated financial statements included in Part II of this Annual Report on Form 10-K.

### **Available Information**

All our filings with the SEC as well as amendments to such filings are available on our internet website free of charge generally within 24 hours after we file such material with the SEC. Our website address is *www.libertyglobal.com*. The information on our website is not part of this Annual Report on Form 10-K and is not incorporated by reference herein.

### Item 1A. RISK FACTORS

In addition to the other information contained in this Annual Report on Form 10-K, you should consider the following risk factors in evaluating our results of operations, financial condition, business and operations or an investment in the shares of our company.

The risk factors described in this section have been separated into five groups:

- risks that relate to the competition we face and the technology used in our businesses;
- risks that relate to our operating in overseas markets and being subject to foreign regulation;
- risks that relate to certain financial matters;
- risks relating to our equity capital structure; and
- other risks, including risks that, among other things, relate to the obstacles that may be faced by anyone who may seek
  to acquire us.

Although we describe below and elsewhere in this Annual Report on Form 10-K the risks we consider to be the most material, there may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that also could have material adverse effects on our results of operations, financial condition, business or operations in the future. In addition, past financial performance may not be a reliable indicator of future performance and historical trends should not be used to anticipate results or trends in future periods.

If any of the events described below, individually or in combination, were to occur, our businesses, prospects, financial condition, results of operations and/or cash flows could be materially adversely affected.

## **Factors Relating to Competition and Technology**

We operate in increasingly competitive markets, and there is a risk that we will not be able to effectively compete with other service providers. The markets for cable television, broadband internet, fixed-line telephony and mobile services in many of the regions in which we operate are highly competitive. In the provision of video services, we face competition from FTA and DTT broadcasters, video provided via satellite platforms, networks using DSL, VDSL or vectoring technology, MMDS operators, FTTx networks, over-the-top video content aggregators, and, in some countries where parts of our systems are overbuilt, cable networks, among others. Our operating businesses are facing increasing competition from video services provided by, or over the networks of, incumbent telecommunications operators and other service providers. As the availability and speed of broadband internet increases, we also face competition from over-the-top video content providers utilizing our or our competitors' high-speed internet connections. In the provision of telephony and broadband internet services, we are experiencing increasing competition from the incumbent telecommunications operators and other service providers in each country in which we operate, as well as mobile providers of voice and data. The incumbent telecommunications operators typically dominate the market for these services and have the advantage of nationwide networks and greater resources than we have to devote to the provision of these services. Many of the incumbent operators are now offering double-play, triple-play and quadruple-play bundles of services. In many countries, we also compete with other operators using LLU to provide these services, other facilities-based operators and wireless providers. Developments in the DSL and other technology used by the incumbent telecommunications operators and alternative providers have improved the attractiveness of our competitors' products and services and strengthened their competitive position. Developments in wireless technologies, such as LTE (the next generation of ultra high-speed mobile data) and WiFi, are creating additional competitive challenges.

In some of our markets, national and local government agencies may seek to become involved, either directly or indirectly, in the establishment of FTTx networks, DTT systems or other communications systems. We intend to pursue available options to restrict such involvement or to ensure that such involvement is on commercially reasonable terms. There can be no assurance, however, that we will be successful in these pursuits. As a result, we may face competition from entities not requiring a normal commercial return on their investments. In addition, we may face more vigorous competition than would have been the case if there were no government involvement.

We expect the level and intensity of competition to continue to increase from both existing competitors and new market entrants as a result of changes in the regulatory framework of the industries in which we operate, advances in technology, the influx of new market entrants and strategic alliances and cooperative relationships among industry participants. Increased competition could result in increased customer churn, reductions of customer acquisition rates for some products and services and significant price competition in most of our markets. In combination with difficult economic environments, these competitive pressures could adversely impact our ability to increase or, in certain cases, maintain the revenue, average monthly subscription revenue per average RGU (ARPU), RGUs, adjusted operating income before depreciation and amortization (Adjusted OIBDA), Adjusted OIBDA margins and liquidity of our operating segments.

Changes in technology may limit the competitiveness of and demand for our services. Technology in the video, telecommunications and data services industries is changing rapidly, including advances in current technologies and the emergence of new technologies. New technologies, products and services may impact consumer behavior and therefore demand for our products and services. The ability to anticipate changes in technology and consumer tastes and to develop and introduce new and enhanced products and services on a timely basis will affect our ability to continue to grow, increase our revenue and number of subscribers and remain competitive. New products and services, once marketed, may not meet consumer expectations or demand, can be subject to delays in development and may fail to operate as intended. A lack of market acceptance of new products and services that we may offer, or the development of significant competitive products or services by others, could have a material adverse impact on our revenue and Adjusted OIBDA.

Our property and equipment additions may not generate a positive return. The video, broadband internet and telephony businesses in which we operate are capital intensive. Significant additions to our property and equipment are required to add customers to our networks and to upgrade or expand our broadband communications networks and upgrade customer premises equipment to enhance our service offerings and improve the customer experience. These additions require significant capital

expenditures for equipment and associated labor costs. Significant competition, the introduction of new technologies, the expansion of existing technologies, such as FTTx and advanced DSL technologies, or adverse regulatory developments could cause us to decide to undertake previously unplanned upgrades of our networks and customer premises equipment in the impacted markets. In addition, no assurance can be given that any future upgrades or extensions of our network (including the Network Extensions) will generate a positive return or that we will have adequate capital available to finance such future upgrades or extensions. If we are unable to, or elect not to, pay for costs associated with adding new customers, expanding, extending or upgrading our networks or making our other planned or unplanned additions to our property and equipment, our growth could be limited and our competitive position could be harmed.

We depend almost exclusively on our relationships with third-party programming providers and broadcasters for programming content, and a failure to acquire a wide selection of popular programming on acceptable terms could adversely affect our business. The success of our video subscription business depends, in large part, on our ability to provide a wide selection of popular programming to our subscribers. We generally do not produce our own content and we depend on our agreements, relationships and cooperation with public and private broadcasters and collective rights associations to obtain such content. If we fail to obtain a diverse array of popular programming for our pay television services, including a sufficient selection of HD channels as well as non-linear content (such as VoD and DVR capability), on satisfactory terms, we may not be able to offer a compelling video product to our customers at a price they are willing to pay. Additionally, we are frequently negotiating and renegotiating programming agreements and our annual costs for programming can vary. There can be no assurance that we will be able to renegotiate or renew the terms of our programming agreements on acceptable terms or at all. We expect that programming and copyright costs will continue to rise in future periods as a result of, among other factors, higher costs associated with the expansion of our digital video content, including rights associated with ancillary product offerings and rights that provide for the broadcast of live sporting events, and retransmission or copyright fees payable to public broadcasters.

If we are unable to obtain or retain attractively priced competitive content, demand for our existing and future television services could decrease, thereby limiting our ability to attract new customers, maintain existing customers and/or migrate customers from lower tier programming to higher tier programming, thereby inhibiting our ability to execute our business plans. Furthermore, we may be placed at a competitive disadvantage if certain of our competitors, for example BT and Sky in the U.K., obtain exclusive programming rights, particularly with respect to popular sports and movie programming. In addition, must carry requirements may consume channel capacity otherwise available for more attractive programming.

We depend on third-party suppliers and licensors to supply necessary equipment, software and certain services required for our businesses. We rely on third-party vendors for the equipment, software and services that we require in order to provide services to our customers. Our suppliers often conduct business worldwide and their ability to meet our needs is subject to various risks, including political and economic instability, natural calamities, interruptions in transportation systems, terrorism and labor issues. As a result, we may not be able to obtain the equipment, software and services required for our businesses on a timely basis or on satisfactory terms. Any shortfall in customer premises equipment could lead to delays in connecting customers to our services and, accordingly, could adversely impact our ability to maintain or increase our RGUs, revenue and cash flows. Also, if demand exceeds the suppliers' and licensors' capacity or if they experience financial difficulties, the ability of our businesses to provide some services may be materially adversely affected, which in turn could affect our businesses' ability to attract and retain customers. Although we actively monitor the creditworthiness of our key third-party suppliers and licensors, the financial failure of a key third-party supplier or licensor could disrupt our operations and have an adverse impact on our revenue and cash flows. We rely upon intellectual property that is owned or licensed by us to use various technologies, conduct our operations and sell our products and services. Legal challenges could be made against our use of our or our licensed intellectual property rights (such as trademarks, patents and trade secrets) and we may be required to enter into licensing arrangements on unfavorable terms, incur monetary damages or be enjoined from use of the intellectual property rights in question.

Our businesses that offer mobile telephony and data services rely on the radio access networks of third-party wireless network providers to carry our mobile communications traffic. Our services to mobile customers rely on the use of MVNO arrangements in which we utilize the radio access networks of third-party wireless network providers to carry our mobile communications traffic. If any of our MVNO arrangements are terminated, or if the respective third-party wireless network provider fails to provide the services required under an MVNO arrangement, or if a third-party wireless network provider fails to deploy and maintain its network, and we are unable to find a replacement network operator on a timely and commercial basis or at all, we could be prevented from continuing the mobile services relying on such MVNO arrangement. Additionally, as our MVNO arrangements come to term, we may not be able to renegotiate renewal or replacement MVNO arrangements on the same or more favorable terms.

Failure in our technology or telecommunications systems or leakage of sensitive customer data could significantly disrupt our operations, which could reduce our customer base and result in lost revenue. Our success depends, in part, on the continued and uninterrupted performance of our information technology and network systems as well as our customer service centers. The

hardware supporting a large number of critical systems for our cable network in a particular country or geographic region is housed in a relatively small number of locations. Our systems and equipment (including our routers and set-top boxes) are vulnerable to damage or security breach from a variety of sources, including telecommunications failures, power loss, malicious human acts, security flaws, and natural disasters. Moreover, despite security measures, our servers, systems and equipment are potentially vulnerable to physical or electronic break-ins, computer viruses, worms, phishing attacks and similar disruptive actions. Furthermore, our operating activities could be subject to risks caused by misappropriation, misuse, leakage, falsification or accidental release or loss of information maintained in our information technology systems and networks and those of our third-party vendors, including customer, personnel and vendor data. As a result of the increasing awareness concerning the importance of safeguarding personal information, the potential misuse of such information and legislation that has been adopted or is being considered across all of our markets regarding the protection, privacy and security of personal information, information-related risks are increasing, particularly for businesses like ours that handle a large amount of personal customer data. Failure to comply with these data protection laws may result in, among other consequences, fines.

Despite the precautions we have taken, unanticipated problems affecting our systems could cause failures in our information technology systems or disruption in the transmission of signals over our networks or similar problems. Any disruptive situation that causes loss, misappropriation, misuse or leakage of data could damage our reputation and the credibility of our operations. Further, sustained or repeated system failures that interrupt our ability to provide service to our customers or otherwise meet our business obligations in a timely manner could adversely affect our reputation and result in a loss of customers and net revenue.

The "Virgin" brand is used by our subsidiary Virgin Media under licenses from Virgin Enterprises Limited and is not under the control of Virgin Media. The activities of the group of companies utilizing the "Virgin" brand and other licensees could have a material adverse effect on the goodwill of customers towards Virgin Media as a licensee and the licenses from Virgin Enterprises Limited can be terminated in certain circumstances. The "Virgin" brand is integral to Virgin Media's corporate identity. Virgin Media is reliant on the general goodwill of consumers towards the Virgin brand. Consequently, adverse publicity in relation to the group of companies utilizing the "Virgin" brand or its principals, particularly Sir Richard Branson, who is closely associated with the brand, or in relation to another licensee of the "Virgin" name and logo (particularly in the U.K., where Virgin Media does business) could have a material adverse effect on Virgin Media's reputation and on Virgin Media's and our business and results of operations. In addition, the licenses from Virgin Enterprises Limited can be terminated in certain circumstances. For example, Virgin Enterprises Limited can terminate the licenses, after providing Virgin Media with an opportunity to cure, (1) if Virgin Media or any of its affiliates commits persistent and material breaches or a flagrant and material breach of the licenses, (2) if Virgin Enterprises Limited has reasonable grounds to believe that the use (or lack of use) of the licensed trademarks by Virgin Media has been or is likely to result in a long-term and material diminution in the value of the "Virgin" brand, or (3) if a third party who is not (or one of whose directors is not) a "fit and proper person", such as a legally disqualified director or a bankrupt entity, acquires "control" of Liberty Global. Such a termination could have a material adverse effect on Virgin Media's and our business and results of operations.

# **Factors Relating to Overseas Operations and Foreign Regulation**

Our businesses are conducted almost exclusively outside of the United States, which gives rise to numerous operational risks. Our businesses operate almost exclusively in countries outside the United States and are thereby subject to the following inherent risks:

- fluctuations in foreign currency exchange rates;
- difficulties in staffing and managing international operations;
- potentially adverse tax consequences;
- export and import restrictions, custom duties, tariffs and other trade barriers;
- increases in taxes and governmental fees;
- economic and political instability; and
- changes in foreign and domestic laws and policies that govern operations of foreign-based companies.

Operational risks that we may experience in certain countries include disruptions of services or loss of property or equipment that are critical to overseas businesses due to expropriation, nationalization, war, insurrection, terrorism or general social or political unrest.

We are exposed to foreign currency exchange rate risk. We are exposed to foreign currency exchange rate risk with respect to our consolidated debt in situations where our debt is denominated in a currency other than the functional currency of the operations whose cash flows support our ability to repay or refinance such debt. Although we generally seek to match the denomination of our and our subsidiaries' borrowings with the functional currency of the operations that are supporting the respective borrowings, market conditions or other factors may cause us to enter into borrowing arrangements that are not denominated in the functional currency of the underlying operations (unmatched debt). In these cases, our policy is to provide for an economic hedge against foreign currency exchange rate movements by using derivative instruments to synthetically convert unmatched debt into the applicable underlying currency. At December 31, 2015, substantially all of our debt was either directly or synthetically matched to the applicable functional currencies of the underlying operations.

In addition to the exposure that results from the mismatch of our borrowings and underlying functional currencies, we are exposed to foreign currency risk to the extent that we enter into transactions denominated in currencies other than our or our subsidiaries' respective functional currencies (non-functional currency risk), such as equipment purchases, programming contracts, notes payable and notes receivable (including intercompany amounts). Changes in exchange rates with respect to amounts recorded in our consolidated balance sheets related to these items will result in unrealized (based upon period-end exchange rates) or realized foreign currency transaction gains and losses upon settlement of the transactions. Moreover, to the extent that our revenue, costs and expenses are denominated in currencies other than our respective functional currencies, we will experience fluctuations in our revenue, costs and expenses solely as a result of changes in foreign currency exchange rates. In this regard, we currently expect that during 2016, (1) less than 1% of our revenue, (2) approximately 3% to 5% of our aggregate operating and SG&A expenses (exclusive of share-based compensation expense) and (3) approximately 7% to 9% of our property and equipment additions will be denominated in non-functional currencies, including amounts denominated in (a) U.S. dollars in Chile and Europe and (b) euros in the U.K., Poland, the Czech Republic, Romania, Switzerland and Hungary. Our expectations with respect to our non-functional currency transactions in 2016 may differ from actual results. Generally, we will consider hedging non-functional currency risks when the risks arise from agreements with third parties that involve the future payment or receipt of cash or other monetary items to the extent that we can reasonably predict the timing and amount of such payments or receipts and the payments or receipts are not otherwise hedged. In this regard, we have entered into foreign currency forward contracts to hedge certain of these risks. Certain non-functional currency risks related to our revenue, operating and selling, general and administrative expenses and property and equipment additions were not hedged as of December 31, 2015. For additional information concerning our foreign currency forward contracts, see note 7 to our consolidated financial statements included in Part II of this Annual Report on Form 10-K.

We also are exposed to unfavorable and potentially volatile fluctuations of the U.S. dollar (our reporting currency) against the currencies of our operating subsidiaries when their respective financial statements are translated into U.S. dollars for inclusion in our consolidated financial statements. Cumulative translation adjustments are recorded in accumulated other comprehensive earnings (loss) as a separate component of equity. Any increase (decrease) in the value of the U.S. dollar against any foreign currency that is the functional currency of one of our operating subsidiaries will cause us to experience unrealized foreign currency translation losses (gains) with respect to amounts already invested in such foreign currencies. Accordingly, we may experience a negative impact on our comprehensive earnings (loss) and equity with respect to our holdings solely as a result of foreign currency translation. Our primary exposure to foreign currency translation risk during the three months ended December 31, 2015, was to the euro and British pound sterling as 43.8% and 37.0% of our U.S. dollar revenue during the period was derived from subsidiaries whose functional currencies are the euro and British pound sterling, respectively. In addition, our reported operating results are impacted by changes in the exchange rates for the Swiss franc, the Chilean peso and other local currencies in Europe. We generally do not hedge against the risk that we may incur non-cash losses upon the translation of the financial statements of our subsidiaries and affiliates into U.S. dollars.

Our businesses are subject to risks of adverse regulation. Our businesses are subject to the unique regulatory regimes of the countries in which they operate. Video distribution, broadband internet, fixed-line telephony and mobile businesses are subject to licensing or registration eligibility rules and regulations, which vary by country. The provision of electronic communications networks and services requires our licensing from, or registration with, the appropriate regulatory authorities and, for telephony services, entrance into interconnection arrangements with other phone companies, including the incumbent phone company. It is possible that countries in which we operate may adopt laws and regulations regarding electronic commerce, which could dampen the growth of the internet services being offered and developed by these businesses. In a number of countries, our ability to increase the prices we charge for our cable television service or make changes to the programming packages we offer is limited by regulation or conditions imposed by competition authorities or is subject to review by regulatory authorities or is subject to termination rights of customers. In addition, regulatory authorities may grant new licenses to third parties and, in any event, in most of our markets new entry is possible without a license, although there may be registration eligibility rules and regulations, resulting in greater competition in territories where our businesses may already be active. More significantly, regulatory authorities may require us to grant third parties access to our bandwidth, frequency capacity, facilities or services to distribute their own services or resell our services to end customers. Consequently, our businesses must adapt their ownership and organizational

structure as well as their pricing and service offerings to satisfy the rules and regulations to which they are subject. A failure to comply with applicable rules and regulations could result in penalties, restrictions on our business or loss of required licenses or other adverse conditions.

Adverse changes in rules and regulations could:

- impair our ability to use our bandwidth in ways that would generate maximum revenue and Adjusted OIBDA;
- create a shortage of capacity on our networks, which could limit the types and variety of services we seek to provide our customers;
- strengthen our competitors by granting them access and lowering their costs to enter into our markets; and
- have a significant adverse impact on our profitability.

Businesses, including ours, that offer multiple services, such as video distribution as well as internet and telephony, or that are vertically integrated and offer both video distribution and programming content, often face close regulatory scrutiny from competition authorities in several countries in which we operate. This is particularly the case with respect to any proposed business combinations, which will often require clearance from national competition authorities. The regulatory authorities in several countries in which we do business have considered from time to time what access rights, if any, should be afforded to third parties for use of existing cable television networks and have imposed access obligations in certain countries. This has resulted, for example, in obligations with respect to call termination for our telephony business in Europe, video must carry obligations in many markets in which we operate and video and broadband internet access obligations in Belgium.

When we acquire additional communications companies, these acquisitions may require the approval of governmental authorities (either at country or, in the case of the EU, European level), which can block, impose conditions on, or delay an acquisition, thus hampering our opportunities for growth. In the event conditions are imposed and we fail to meet them in a timely manner, the governmental authority may impose fines and, if in connection with a merger transaction, may require restorative measures, such as mandatory disposition of assets or divestiture of operations.

New legislation may significantly alter the regulatory regime applicable to us, which could adversely affect our competitive position and profitability, and we may become subject to more extensive regulation if we are deemed to possess significant market power in any of the markets in which we operate. Significant changes to the existing regulatory regime applicable to the provision of cable television, telephony and internet services have been and are still being introduced. For example, in the EU a large element of regulation affecting our business derives from a number of Directives that are the basis of the regulatory regime concerning many of the services we offer across the EU. The various Directives require Member States to harmonize their laws on communications and cover issues such as access, user rights, privacy and competition. These Directives are reviewed by the EU from time to time and any changes to them could lead to substantial changes in the way in which our businesses are regulated and to which we would have to adapt. In addition, we are subject to review by competition or national regulatory authorities in certain countries concerning whether we exhibit Significant Market Power. A finding of Significant Market Power can result in our company becoming subject to pricing, open access, unbundling and other requirements that could provide a more favorable operating environment for existing and potential competitors.

We cannot be certain that we will be successful in acquiring new businesses or integrating acquired businesses with our existing operations, or that we will achieve the expected returns on our acquisitions. Historically, our businesses have grown, in part, through selective acquisitions that enabled them to take advantage of existing networks, local service offerings and regionspecific management expertise. We expect to seek to continue growing our businesses through acquisitions in selected markets, such as the acquisition of Virgin Media completed in June 2013 (the Virgin Media Acquisition), the Ziggo Acquisition completed in November 2014, the Choice Acquisition in June 2015, the BASE acquisition in 2016 and the pending acquisition of CWC. Our ability to acquire new businesses may be limited by many factors, including availability of financing, debt covenants, the prevalence of complex ownership structures among potential targets, government regulation and competition from other potential acquirers, including private equity funds. Even if we are successful in acquiring new businesses, the integration of these businesses, such as Virgin Media, Ziggo, Choice, BASE and CWC, may present significant costs and challenges associated with: realizing economies of scale in interconnection, programming and network operations; eliminating duplicative overheads; integrating personnel, networks, financial systems and operational systems; greater than anticipated expenditures required for compliance with regulatory standards or for investments to improve operating results, and failure to achieve the business plan with respect to any such acquisition. We cannot be assured that we will be successful in acquiring new businesses or realizing the anticipated benefits of any completed acquisition, including, for example, the Virgin Media Acquisition, the Ziggo Acquisition, the Choice Acquisition, the BASE acquisition and the pending acquisition of CWC.

In addition, we anticipate that most, if not all, companies acquired by us will be located outside the United States. Foreign companies may not have disclosure controls and procedures or internal controls over financial reporting that are as thorough or effective as those required by U.S. securities laws. While we intend to conduct appropriate due diligence and to implement appropriate controls and procedures as we integrate acquired companies, we may not be able to certify as to the effectiveness of these companies' disclosure controls and procedures or internal controls over financial reporting until we have fully integrated them.

The expected benefits of the Virgin Media Acquisition may not be realized. There can be no assurance that the business objectives of our redomestication in the U.K. as a result of the Virgin Media Acquisition will be achieved, particularly as the achievement of the benefits are, in many important respects, subject to factors that we do not control. These factors include such things as the reactions of third parties with whom we enter into contracts and do business and the reactions of investors, analysts and U.K. and U.S. taxing authorities. Our ongoing expenses have increased as a result of the redomestication to the U.K., including those expenses related to complying with U.K. corporate and tax laws. These additional expenses could serve to reduce or offset the benefits realized from the redomestication.

In addition, while we believe that, under the current U.S. tax statute and regulations, the Virgin Media Acquisition would not cause Liberty Global to be treated as a U.S. domestic corporation for federal tax purposes, the IRS may interpret the current statute and regulations differently, or the U.S. Congress, the IRS, the U.K. Parliament or U.K. tax authorities may enact new statutory or regulatory provisions, which, in each case, could adversely affect our status as a non-U.S. corporation, or otherwise adversely affect our anticipated global tax position. Retroactive statutory or regulatory actions have occurred in the past, and there can be no assurance that any such provisions, if enacted or promulgated, would not have retroactive application to us, the Virgin Media Acquisition or any of our subsequent actions. Our results of operations and cash flow would be adversely impacted if we were to be subject to U.S. corporate income tax as a domestic corporation.

We may have exposure to additional tax liabilities. We are subject to income taxes as well as non-income based taxes, such as value added tax, or VAT, in the U.K., the U.S. and many other jurisdictions around the world. Significant judgment is required in determining our worldwide provision for income taxes and other tax liabilities. In the ordinary course of our business, there are many transactions and calculations where the ultimate tax determination is uncertain. We are regularly under audit by tax authorities in many of the jurisdictions in which we operate. Although we believe that our tax estimates are reasonable, any material differences as a result of final determinations of tax audits or tax disputes could have an adverse effect on our financial position and results of operations in the period or periods for which determination is made. For example, (1) the U.K. tax authorities have challenged Virgin Media's application of VAT with respect to certain revenue generating activities and in connection with prompt payment discounts, and (2) as a result of an audit, Hungarian tax authorities have assessed our DTH operations in Luxembourg with an obligation to pay VAT of approximately HUF 5,902.2 (\$20.3 million), excluding interest and penalties, that we are currently appealing, each as more fully described in note 17 to our consolidated financial statements included in Part II of this Annual Report on Form 10-K.

Because the majority of our subsidiaries have some or all of their ownership through U.S. corporations, our worldwide effective tax rate is subject to provisions of U.S. tax law that defer the imposition of U.S. tax on certain foreign active income until that income is repatriated to the United States. Any repatriation, through our U.S. ownership structure, of assets currently held by subsidiaries in foreign jurisdictions or recognition of income that fails to meet the U.S. tax requirements related to deferral of U.S. income tax, may result in a higher effective tax rate for our company. While the company may mitigate this increase in its effective tax rate through claiming a foreign tax credit against its U.S. federal income taxes or potentially have foreign or U.S. taxes reduced under applicable income tax treaties, we are subject to various limitations.

We are subject to changing tax laws, treaties and regulations in and between countries in which we operate, including treaties between the U.K., the U.S. and the many other jurisdictions in which we have a presence. Also, various income tax proposals in the jurisdictions in which we operate could result in changes to the existing laws on which our deferred taxes are calculated. A change in these tax laws, treaties or regulations, or in the interpretation thereof, could result in a materially higher income or non-income tax expense. Any such material changes could cause a material change in our effective tax rate, such as the new corporate rate enacted in the U.K. in November 2015, as more fully described in note 11 to our consolidated financial statements included in Part II of this Annual Report on Form 10-K.

Further changes in the tax laws of the foreign jurisdictions in which we operate could arise as a result of the base erosion and profit shifting (BEPS) project being undertaken by the OECD. The OECD, which represents a coalition of member countries that encompass most of the jurisdictions in which we operate, is undertaking studies and publishing action plans that include recommendations aimed at addressing what they believe are issues within tax systems that may lead to tax avoidance by companies. It is possible that jurisdictions in which we do business could react to the BEPS initiative or their own concerns by enacting tax legislation that could adversely affect us or our shareholders through increasing our tax liabilities.

## **Factors Relating to Certain Financial Matters**

Our substantial leverage could limit our ability to obtain additional financing and have other adverse effects. We seek to maintain our debt at levels that provide for attractive equity returns without assuming undue risk. In this regard, we generally seek to cause our operating subsidiaries to maintain their debt at levels that result in a consolidated debt balance that is between four and five times our consolidated Adjusted OIBDA (as defined in note 18 to our consolidated financial statements included in Part II of this Annual Report). As a result, we are highly leveraged. At December 31, 2015, our outstanding consolidated debt and capital lease obligations aggregated \$47.1 billion, including \$2,537.9 million that is classified as current in our consolidated balance sheet and \$42.0 billion that is not due until 2021 or thereafter. We believe that we have sufficient resources to repay or refinance the current portion of our debt and capital lease obligations and to fund our foreseeable liquidity requirements during the next 12 months. As our debt maturities grow in later years, however, we anticipate that we will seek to refinance or otherwise extend our debt maturities. In this regard, we completed refinancing transactions in 2015 that, among other things, resulted in the extension of certain of our subsidiaries' debt maturities. No assurance can be given that we will be able to complete additional refinancing transactions or otherwise extend our debt maturities. In this regard, it is difficult to predict how political and economic conditions, sovereign debt concerns or any adverse regulatory developments will impact the credit and equity markets we access and our future financial position.

Our ability to service or refinance our debt and to maintain compliance with the leverage covenants in the credit agreements and indentures of certain of our subsidiaries is dependent primarily on our ability to maintain or increase the Adjusted OIBDA of our subsidiaries and to achieve adequate returns on our property and equipment additions and acquisitions. For example, if the Adjusted OIBDA of our subsidiary, UPC Broadband Holding, were to decline, we could be required to partially repay or limit our borrowings under the UPC Broadband Holding Bank Facility in order to maintain compliance with applicable covenants. Accordingly, if our cash provided by operations declines or we encounter other material liquidity requirements, we may be required to seek additional debt or equity financing in order to meet our debt obligations and other liquidity requirements as they come due. In addition, our current debt levels may limit our ability to incur additional debt financing to fund working capital needs, acquisitions, property and equipment additions, or other general corporate requirements. We can give no assurance that any additional debt or equity financing will be available on terms that are as favorable as the terms of our existing debt or at all. During 2015, we purchased \$2,344.5 million (including direct acquisition costs) of Liberty Global Class C ordinary shares and Old Liberty Global Class C ordinary shares. Any cash used by our company in connection with any future purchases of our ordinary shares would not be available for other purposes, including the repayment of debt.

Certain of our subsidiaries are subject to various debt instruments that contain restrictions on how we finance our operations and operate our businesses, which could impede our ability to engage in beneficial transactions. Certain of our subsidiaries are subject to significant financial and operating restrictions contained in outstanding credit agreements, indentures and similar instruments of indebtedness. These restrictions will affect, and in some cases significantly limit or prohibit, among other things, the ability of those subsidiaries to:

- incur or guarantee additional indebtedness;
- pay dividends or make other upstream distributions;
- make investments:
- transfer, sell or dispose of certain assets, including subsidiary stock;
- merge or consolidate with other entities;
- engage in transactions with us or other affiliates; or
- create liens on their assets.

As a result of restrictions contained in these debt instruments, the companies party thereto, and their subsidiaries, could be unable to obtain additional capital in the future to:

- fund property and equipment additions or acquisitions that could improve their value;
- meet their loan and capital commitments to their business affiliates;
- invest in companies in which they would otherwise invest;

- fund any operating losses or future development of their business affiliates;
- obtain lower borrowing costs that are available from secured lenders or engage in advantageous transactions that monetize their assets; or
- conduct other necessary or prudent corporate activities.

In addition, most of the credit agreements to which these subsidiaries are parties include financial covenants that require them to maintain certain financial ratios, including ratios of total debt to Adjusted OIBDA and Adjusted OIBDA to interest expense. Their ability to meet these financial covenants may be affected by adverse economic, competitive, or regulatory developments and other events beyond their control, and we cannot assure you that these financial covenants will be met. In the event of a default under such subsidiaries' credit agreements or indentures, the lenders may accelerate the maturity of the indebtedness under those agreements or indentures, which could result in a default under other outstanding credit facilities or indentures. We cannot assure you that any of these subsidiaries will have sufficient assets to pay indebtedness outstanding under their credit agreements and indentures. Any refinancing of this indebtedness is likely to contain similar restrictive covenants.

We are exposed to interest rate risks. Shifts in such rates may adversely affect the debt service obligation of our subsidiaries. We are exposed to the risk of fluctuations in interest rates, primarily through the credit facilities of certain of our subsidiaries, which are indexed to EURIBOR, LIBOR or other base rates. Although we enter into various derivative transactions to manage exposure to movements in interest rates, there can be no assurance that we will be able to continue to do so at a reasonable cost or at all. If we are unable to effectively manage our interest rate exposure through derivative transactions, any increase in market interest rates would increase our interest rate exposure and debt service obligations, which would exacerbate the risks associated with our leveraged capital structure.

We are subject to increasing operating costs and inflation risks, which may adversely affect our earnings. While our operations attempt to increase our subscription rates to offset increases in programming and operating costs, there is no assurance that they will be able to do so. In certain countries in which we operate, our ability to increase subscription rates is subject to regulatory controls. Also, our ability to increase subscription rates may be constrained by competitive pressures. Therefore, operating costs may rise faster than associated revenue, resulting in a material negative impact on our cash flow and net earnings (loss). We are also impacted by inflationary increases in salaries, wages, benefits and other administrative costs in certain of our markets.

Continuing uncertainties and challenging conditions in the global economy and in the countries in which we operate may adversely impact our business, financial condition and results of operations. The current macroeconomic environment is highly volatile, and continuing instability in global markets, including the ongoing struggles in Europe related to sovereign debt issues, the risk of deflation and the stability of the euro, has contributed to a challenging global economic environment. Future developments are dependent upon a number of political and economic factors, including the effectiveness of measures by the EU Commission to address debt burdens of certain countries in Europe and the overall stability of the eurozone. As a result, we cannot predict how long challenging conditions will exist or the extent to which the markets in which we operate may deteriorate. Additional risks arising from the ongoing economic challenges in Europe are described below under the Risk Factor titled: We are exposed to sovereign debt and currency instability risks in Europe that could have an adverse impact on our liquidity, financial condition and cash flows.

Unfavorable economic conditions may impact a significant number of our subscribers and/or the prices we are able to charge for our products and services, and, as a result, it may be (1) more difficult for us to attract new subscribers, (2) more likely that subscribers will downgrade or disconnect their services and (3) more difficult for us to maintain ARPUs at existing levels. Countries may also seek new or increased revenue sources due to fiscal deficits. Such actions may further adversely affect our company. Accordingly, our ability to increase, or, in certain cases, maintain, the revenue, ARPUs, RGUs, Adjusted OIBDA, Adjusted OIBDA margins and liquidity of our operating segments could be adversely affected if the macroeconomic environment remains uncertain or declines further. We are currently unable to predict the extent of any of these potential adverse effects.

We are exposed to sovereign debt and currency instability risks that could have an adverse impact on our liquidity, financial condition and cash flows. Our operations are subject to macroeconomic and political risks that are outside of our control. For example, high levels of sovereign debt in the U.S. and several European countries in which we operate, combined with weak growth and high unemployment, could potentially lead to fiscal reforms (including austerity measures), tax increases, sovereign debt restructurings, currency instability, increased counterparty credit risk, high levels of volatility and disruptions in the credit and equity markets, as well as other outcomes that might adversely impact our company. With regard to currency instability issues, concerns exist in the eurozone with respect to individual macro-fundamentals on a country-by-country basis, as well as with respect to the overall stability of the European monetary union and the suitability of a single currency to appropriately deal with specific fiscal management and sovereign debt issues in individual eurozone countries. The realization of these concerns could lead to

the exit of one or more countries from the European monetary union and the re-introduction of individual currencies in these countries, or, in more extreme circumstances, the possible dissolution of the European monetary union entirely, which could result in the redenomination of a portion or, in the extreme case, all of our euro-denominated assets, liabilities and cash flows to the new currency of the country in which they originated. This could result in a mismatch in the currencies of our assets, liabilities and cash flows. Any such mismatch, together with the capital market disruption that would likely accompany any such redenomination event, could have a material adverse impact on our liquidity and financial condition. Furthermore, any redenomination event would likely be accompanied by significant economic dislocation, particularly within the eurozone countries, which in turn could have an adverse impact on demand for our products and services, and accordingly, on our revenue and cash flows. Moreover, any changes from euro to non-euro currencies within the countries in which we operate would require us to modify our billing and other financial systems. No assurance can be given that any required modifications could be made within a time frame that would allow us to timely bill our customers or prepare and file required financial reports. In light of the significant exposure that we have to the euro through our euro-denominated borrowings, derivative instruments, cash balances and cash flows, a redenomination event could have a material adverse impact on our company.

Concerns also exist with respect to the Puerto Rico government's cash flows and, accordingly, its ability to meet its debt obligations. For example, the Puerto Rico government failed to make bond payments of \$58 million in August 2015 and \$36 million in January 2016. Before the first payment default, the Puerto Rico government enacted a new tax law that, among other things, (1) increased the sales and use tax rate from 7.0% to 11.5%, effective July 1, 2015, and (2) provided for the taxing of services between businesses at a rate of 4%, effective October 1, 2015. Effective April 1, 2016, the aforementioned sales and use tax will be replaced with a VAT of 10.5% and a sales and use tax of 1.0%. Prior to the new tax law, such services were exempt from taxation. More changes to the Puerto Rico tax system are expected during 2016. Puerto Rico's government is also currently implementing austerity and a number of other measures to improve its solvency. It remains possible, if not likely, that Puerto Rico will be required to restructure its debt obligations to remain solvent. If the fiscal and economic conditions in Puerto Rico were to worsen as a result of these or other factors, (a) the population of Puerto Rico could continue to decline, reducing the future demand for Liberty Puerto Rico's services, and (b) the demand and ability of customers to pay for Liberty Puerto Rico's services could be impaired, which could have a negative impact on Liberty Puerto Rico's results of operations, cash flows and financial condition.

We may not freely access the cash of our operating companies. Our operations are conducted through our subsidiaries. Our current sources of corporate liquidity include (1) our cash and cash equivalents and (2) interest and dividend income received on our cash and cash equivalents and investments. From time to time, we also receive (1) proceeds in the form of distributions or loan repayments from our subsidiaries or affiliates, (2) proceeds upon the disposition of investments and other assets and (3) proceeds in connection with the incurrence of debt or the issuance of equity securities. The ability of our operating subsidiaries to pay dividends or to make other payments or advances to us depends on their individual operating results and any statutory, regulatory or contractual restrictions to which they may be or may become subject and in some cases our receipt of such payments or advances may be limited due to tax considerations or the presence of noncontrolling interests. Most of our operating subsidiaries are subject to credit agreements or indentures that restrict sales of assets and prohibit or limit the payment of dividends or the making of distributions, loans or advances to shareholders and partners, including us. In addition, because these subsidiaries are separate and distinct legal entities they have no obligation to provide us funds for payment obligations, whether by dividends, distributions, loans or other payments.

We are exposed to the risk of default by the counterparties to our derivative and other financial instruments, undrawn debt facilities and cash investments. Although we seek to manage the credit risks associated with our derivative and other financial instruments, cash investments and undrawn debt facilities, we are exposed to the risk that our counterparties could default on their obligations to us. Also, even though we regularly review our credit exposures, defaults may arise from events or circumstances that are difficult to detect or foresee. At December 31, 2015, our exposure to counterparty credit risk included (1) derivative assets with an aggregate fair value of \$2,025.2 million, (2) cash and cash equivalent and restricted cash balances of \$1,110.0 million and (3) aggregate undrawn debt facilities of \$3,910.6 million. While we currently have no specific concerns about the creditworthiness of any counterparty for which we have material credit risk exposures, the current economic conditions and uncertainties in global financial markets have increased the credit risk of our counterparties and we cannot rule out the possibility that one or more of our counterparties could fail or otherwise be unable to meet its obligations to us. Any such instance could have an adverse effect on our cash flows, results of operations, financial condition and/or liquidity. In this regard, (1) the financial failure of any of our counterparties could reduce amounts available under committed credit facilities and adversely impact our ability to access cash deposited with any failed financial institution, thereby causing a default under one or more derivative contracts, and (2) tightening of the credit markets could adversely impact our ability to access debt financing on favorable terms, or at all.

Under our derivative contracts, it is generally only the non-defaulting party that has a contractual option to exercise early termination rights upon the default of the other counterparty and to set off other liabilities against sums due upon such termination. However, in an insolvency of a derivative counterparty, under the laws of certain jurisdictions, the defaulting counterparty or its insolvency representatives may be able to compel the termination of one or more derivative contracts and trigger early termination

payment liabilities payable by us, reflecting any mark-to-market value of the contracts for the counterparty. Alternatively, or in addition, the insolvency laws of certain jurisdictions may require the mandatory set off of amounts due under such derivative contracts against present and future liabilities owed to us under other contracts between us and the relevant counterparty. Accordingly, it is possible that we may be subject to obligations to make payments, or may have present or future liabilities owed to us partially or fully discharged by set off as a result of such obligations, in the event of the insolvency of a derivative counterparty, even though it is the counterparty that is in default and not us. To the extent that we are required to make such payments, our ability to do so will depend on our liquidity and capital resources at the time. In an insolvency of a defaulting counterparty, we will be an unsecured creditor in respect of any amount owed to us by the defaulting counterparty, except to the extent of the value of any collateral we have obtained from that counterparty.

The risks we would face in the event of a default by a counterparty to one of our derivative instruments might be eliminated or substantially mitigated if we were able to novate the relevant derivative contracts to a new counterparty following the default of our counterparty. While we anticipate that, in the event of the insolvency of one of our derivative counterparties, we would seek to effect such novations, no assurance can be given that we would obtain the necessary consents to do so or that we would be able to do so on terms or pricing that would be acceptable to us or that any such novation would not result in substantial costs to us. Furthermore, the underlying risks that are the subject of the relevant derivative contracts would no longer be effectively hedged due to the insolvency of our counterparty, unless and until we novate or replace the derivative contract.

We may not report net earnings. We reported losses from continuing operations of \$1,049.5 million, \$980.9 million and \$882.0 million during 2015, 2014 and 2013, respectively. In light of our historical financial performance, we cannot assure you that we will report net earnings in the near future or ever.

### Risks Related to Our Equity Capital Structure

Holders of LiLAC ordinary shares and Liberty Global ordinary shares are shareholders of Liberty Global and are, therefore, subject to risks associated with an investment in our company as a whole, even if a holder does not own both LiLAC ordinary shares and Liberty Global ordinary shares. Even though we have attributed, for financial reporting purposes, all of our consolidated assets, liabilities, revenue, expenses and cash flows to either the LiLAC Group or the Liberty Global Group in order to prepare the attributed financial information for each of those groups, we retain legal title to all of our assets and our capitalization does not limit our legal responsibility, or that of our subsidiaries, for the liabilities included in any set of financial statement schedules. Holders of LiLAC ordinary shares and Liberty Global ordinary shares do not have any legal rights related to specific assets attributed to either group and, in any liquidation, holders of LiLAC ordinary shares and Liberty Global ordinary shares will be entitled to receive a pro rata share of our available net assets based on their respective numbers of liquidation units.

Our board of directors' ability to reattribute businesses, assets and liabilities between the Liberty Global Group and the LiLAC Group may make it difficult to assess the future prospects of the LiLAC Group and/or the Liberty Global Group based on past performance. Our board of directors is vested with discretion to reattribute businesses, assets and liabilities that are attributed to either the Liberty Global Group or the LiLAC Group to the other group, without the approval of any of our shareholders. Any such reattribution made by our board of directors, as well as the existence of the right in and of itself to effect a reattribution, may impact the ability of investors to assess the future prospects of either group, including liquidity and capital resource needs, based on past performance. Shareholders may also have difficulty evaluating the liquidity and capital resources of one group based on past performance, as our board of directors may use the other group's liquidity to fund such group's liquidity and capital expenditure requirements through the use of inter-group loans or other inter-group arrangements.

We could be required to use assets attributed to one group to satisfy liabilities attributed to the other group. The assets attributed to the LiLAC Group are potentially subject to the liabilities attributed to the Liberty Global Group, even if those liabilities arise from lawsuits, contracts or indebtedness that are attributed to the Liberty Global Group. While our proposed management and allocation policies provide that reattributions of assets between groups will result in the creation of an inter-group loan or an inter-group interest or an offsetting reattribution of cash or other assets, no provision of our articles of association prevents us from satisfying liabilities of the Liberty Global Group with assets of the LiLAC Group, and our creditors will not in any way be limited by our equity capital structure from proceeding against any assets they could have proceeded against if we did not have such a structure. Holders of Liberty Global ordinary shares may face similar considerations in that assets attributed to the Liberty Global Group may be required to be used to satisfy liabilities attributed to the LiLAC Group.

The market price of the ordinary shares of each group may not reflect the performance of the respective group. We cannot assure you that the market price of the LiLAC ordinary shares will, in fact, reflect the performance of the group of businesses, assets and liabilities attributed to the LiLAC Group. Holders of LiLAC ordinary shares will be ordinary shareholders of our company as a whole and, as such, will be subject to all risks (and many of the corresponding benefits) associated with an investment in our company and all of our businesses, assets and liabilities. As a result, the market price of each class of LiLAC ordinary shares may be affected by the performance or financial condition of our company as a whole. An adverse market reaction to events relating to the assets and businesses attributed to the Liberty Global Group, such as earnings announcements or announcements

of new products or services, acquisitions or dispositions that the market does not view favorably, may have an adverse effect on the market price of LiLAC ordinary shares. Holders of Liberty Global ordinary shares may face similar considerations in that the price of the Liberty Global ordinary shares may not reflect the performance of the Liberty Global Group alone and may reflect the performance or financial condition of our company as a whole.

The market price of LiLAC ordinary shares may be volatile, could fluctuate substantially and could be affected by factors that do not affect traditional ordinary shares. To the extent the market price of LiLAC ordinary shares tracks the performance of more focused groups of businesses, assets and liabilities than the Old Liberty Global Ordinary Shares did prior to the LiLAC Transaction, the market prices of any class of LiLAC ordinary shares may be more volatile than the market price of Old Liberty Global Ordinary Shares historically was. The market price of LiLAC ordinary shares could also be more sensitive to events or developments that are material only for the LiLAC Group but would not be material for our company as a whole. The market price of LiLAC ordinary shares may be materially affected by, among other things:

- a potential discount that investors may apply because the LiLAC ordinary shares are issued by a common enterprise, rather than a standalone company;
- actual or anticipated fluctuations in the LiLAC Group's operating results or in the operating results of particular companies attributable to the group;
- events or developments affecting the countries or regions in which the businesses attributed to the LiLAC Group operate:
- potential acquisition activity in the LiLAC Group;
- issuances of debt or equity securities to raise capital by us or the companies in which we invest and the manner in which that debt or the proceeds of an equity issuance are attributed to the LiLAC Group;
- changes in financial estimates by securities analysts regarding the LiLAC ordinary shares or the businesses attributed to the LiLAC Group;
- the complex nature and the potential difficulties investors may have in understanding the terms of the LiLAC ordinary shares, as well as concerns regarding the possible effect of certain of those terms on an investment in our shares;
- the lack of market familiarity with tracking shares issued by an English publicly-traded company and of directly applicable legal precedent, given we are not aware of any other English publicly-traded company that has issued such shares; and
- general market conditions.

We have not historically paid any cash dividends, and we may not pay dividends equally or at all on any class of our ordinary shares. We do not presently intend to pay cash dividends on any class of our ordinary shares for the foreseeable future. However, we have the right to pay dividends, effect securities distributions or make bonus issues on the shares of each of the Liberty Global Group and the LiLAC Group in equal or unequal amounts, and we may pay dividends, effect securities distributions or make bonus issues on the shares of one group and not pay dividends, effect securities distributions or make bonus issues on shares of the other group. In addition, any dividends or distributions on, or repurchases of, shares relating to either group will reduce our "distributable reserves" (defined as our accumulated, realized profits less accumulated, realized losses, as measured for U.K. statutory purposes) legally available to be paid as dividends by our company under English law on any of our ordinary shares, including on the ordinary shares relating to the other group.

The fiduciary requirements on our board of directors may in certain circumstances mean that our board of directors makes decisions that could adversely affect only some holders of our shares or that have a disparate impact on holders of any of our shares. Our equity capital structure could give rise to occasions when the interests of holders of Liberty Global ordinary shares might diverge or appear to diverge from the interests of holders of LiLAC ordinary shares. The Liberty Global Group and the LiLAC Group are not separate entities and thus holders of Liberty Global ordinary shares and LiLAC ordinary shares do not have the right to elect separate boards of directors. As a result, our company's directors owe fiduciary duties under English law to our company as a whole as opposed to only particular shareholders or groups of shareholders, provided that the board's actions are not found to be unfairly prejudicial to a shareholder's interests. Decisions deemed to promote the success of the company for the benefit of its shareholders as a whole or otherwise deemed to be in the best interest of our company and all of our shareholders

could be viewed as not being in the best interest of particular shareholders or groups of shareholders when considered independently. Examples include:

- decisions as to the terms of any business relationships that may be created between the Liberty Global Group and the LiLAC Group or the terms of any reattributions of businesses, assets and liabilities between the groups;
- decisions as to the allocation of consideration among the holders of Liberty Global ordinary shares and LiLAC ordinary shares, or among the classes of shares relating to either of our groups, to be received in connection with a scheme of arrangement involving our company;
- decisions as to the allocation of corporate opportunities between the groups, especially where the opportunities might
  meet the strategic business objectives of both groups;
- decisions as to operational and financial matters that could be considered detrimental to one group but beneficial to the other;
- decisions resulting in the redesignation, or conversion, of LiLAC ordinary shares into Liberty Global ordinary shares or deferred shares;
- decisions regarding the creation of, and, if created, the subsequent increase or decrease of any inter-group interest or loan that one group may have in or to the other group;
- decisions as to the internal or external financing attributable to businesses or assets attributed to either of our groups;
- decisions as to the dispositions of assets of either of our groups; and
- decisions as to the payment of dividends on the shares or share buybacks relating to either of our groups.

Our directors' or officers' ownership of LiLAC ordinary shares and Liberty Global ordinary shares may create or appear to create conflicts of interest. If our directors or officers own disproportionate interests (in percentage or value terms) in LiLAC ordinary shares or Liberty Global ordinary shares, that disparity could create or appear to create conflicts of interest when they are faced with decisions that could have different implications for the holders of LiLAC ordinary shares or Liberty Global ordinary shares.

Our management and allocation policies give our board of directors significant discretion. Our board of directors has adopted, after shareholder approval, certain management and allocation policies to serve as guidelines in making decisions regarding the relationships between the Liberty Global Group and the LiLAC Group with respect to matters such as tax liabilities and benefits, inter-group loans, inter-group interests, attribution of assets, financing alternatives, corporate opportunities, payment of dividends and similar items. Our management and allocation policies give our board of directors significant discretion and are subject to change by the board of directors without further shareholder approval. Under these policies, the board of directors has discretion with respect to the recognition or adjustment of inter-group interests that the Liberty Global Group may be treated as holding in the LiLAC Group. The board's discretion also extends to determining if, how and to what extent such inter-group interests will be taken into account in connection with any dividend or other distribution on the LiLAC ordinary shares, redesignation, or conversion, of LiLAC ordinary shares or any other transaction affecting the LiLAC ordinary shares. In making such determination, our board of directors may consider any factor that it deems appropriate, including without limitation, the tax effects of any event or transaction or the use of tax benefits. All determinations made by our board of directors in this regard will be final and binding on all holders of our ordinary shares. The broad discretion that these policies accord our board of directors also extends to other matters, including how future corporate opportunities that may present themselves in Latin America, Europe or elsewhere will be allocated between the LiLAC Group and the Liberty Global Group.

Our board of directors may, in its sole discretion, elect to redesignate, or convert, all of the LiLAC ordinary shares into Liberty Global ordinary shares, thereby changing the nature of the investment of holders of LiLAC ordinary shares and possibly diluting their economic interest in our company, which could result in a loss of value to them. Our articles of association permit our board of directors, in its sole discretion, to redesignate, or convert, all of the LiLAC ordinary shares into Liberty Global ordinary shares. There is no current plan or intention to redesignate, or convert, the LiLAC ordinary shares into Liberty Global ordinary shares. Our board of directors may elect to exercise this authority at any time if it determines that such redesignation is in the best interests of the company and all of our shareholders. This could occur, for example, if our board of directors determines

that the aggregate equity valuation of our company would be increased by eliminating the separate LiLAC ordinary shares, or in connection with a sale or other strategic transaction. In addition, our board may determine to effect such redesignation in connection with the sale of all or substantially all of the assets of the LiLAC Group. A redesignation would preclude the holders of LiLAC ordinary shares from retaining their investment in a security that is intended to reflect separately the performance of the LiLAC Group. We cannot predict the impact on the market value of our shares of (1) our board of directors' ability to effect any such redesignation or (2) the exercise of this redesignation right by our board of directors. In addition, our board of directors may effect such a redesignation at a time when the market value of our shares could cause the holders of the LiLAC ordinary shares to be disadvantaged.

Under certain circumstances, including in connection with a distribution to holders of LiLAC ordinary shares of securities of another corporation, we may reduce the number of LiLAC ordinary shares proportionally, thereby reducing the voting power and liquidity of such shares. Our articles of association permit us to reduce the number of LiLAC ordinary shares in connection with certain transactions, including a distribution to holders of LiLAC ordinary shares following a disposition of the LiLAC Group. We expect that our board of directors would exercise this authority, in its discretion, in connection with a distribution to holders of LiLAC ordinary shares that would materially reduce the amount of assets attributed to the LiLAC Group. The purpose of reducing the number of LiLAC ordinary shares in this case would be to readjust the per share valuation and the aggregate voting power of the LiLAC ordinary shares to reflect the value of the assets attributed to the LiLAC Group following such transaction. Such reduction would further decrease the aggregate voting power of the LiLAC ordinary shares as compared to the Liberty Global ordinary shares. We cannot predict the impact on the market value of LiLAC ordinary shares of the possibility of any such reduction in the number of such shares, including any potential effects resulting from reduced liquidity of the remaining LiLAC ordinary shares.

A third party could acquire control of our company pursuant to an offer to acquire some or all of the Liberty Global ordinary shares only, leaving holders of LiLAC ordinary shares as minority shareholders. An offer to acquire shares in our company may be structured such that the offer is made to acquire only the Liberty Global ordinary shares. If such an acquisition of Liberty Global ordinary shares is successful, this would result in the holders of the LiLAC ordinary shares not sharing in any control premium paid to holders of the Liberty Global ordinary shares. In that case, holders of LiLAC ordinary shares would continue to be minority shareholders of a company with a third party majority shareholder, with no ability to vote against such a change, participate in such offer or otherwise realize any control premium.

Holders of Liberty Global ordinary shares or LiLAC ordinary shares may receive less consideration upon a sale of all or substantially all of the assets attributed to that group than if that group were a separate company. We cannot assure you whether the per share consideration to be paid to holders of Liberty Global ordinary shares or LiLAC ordinary shares in connection with a sale of all or substantially all of the assets of the Liberty Global Group or the LiLAC Group, as applicable, will be equal to or more than the per share value of that share prior to or after the announcement of such a sale. In addition, if the the Liberty Global Group or the LiLAC Group were a separate, independent company and its shares were acquired by another person, certain costs of that sale, including corporate level or withholding or other cross-border taxes, might not be payable in connection with that acquisition. As a result, shareholders of a separate, independent company with the same assets might receive a greater amount of proceeds than the holders of Liberty Global ordinary shares or LiLAC ordinary shares, as applicable, would receive upon a sale of all or substantially all of the assets attributed to such group. Further, there is no requirement that the consideration paid be tax-free to the holders of the shares relating to that group. Accordingly, if we sell all or substantially all of the assets attributed to the Liberty Global Group or the LiLAC Group, the holders of the Liberty Global ordinary shares or LiLAC ordinary shares, as applicable, could suffer a loss in the value of their investment in our company.

Certain protections that our articles of association provide to holders of LiLAC ordinary shares in connection with a sale of not less than 80% of the fair value of the assets of, or equity interests in, the LiLAC Group may not apply if we do not have sufficient distributable reserves or share premium available following such disposition. Our articles of association provide that in connection with a disposition of not less than 80% of the fair value of the assets of, or equity interests in, the LiLAC Group, subject to certain exempt dispositions, our board of directors will be required to distribute cash or other assets with a fair value equal to the available net proceeds of such disposition to holders of LiLAC ordinary shares (with or without a concurrent proportional reduction in the number of outstanding LiLAC ordinary shares), redesignate, or convert, a portion of LiLAC ordinary shares into Liberty Global ordinary shares at a 10% premium, or do a combination of the foregoing. However, our company's ability to take any of such actions at the time may depend (and in the case of a dividend or other distribution, will depend) on the availability of sufficient distributable reserves for the payment of a dividend or other distribution or sufficient share premium required for the creation of additional shares. If sufficient distributable reserves or share premium are not available at the time of the disposition, our board of directors will be permitted to effect the disposition without distributing an amount equal to the net proceeds of such disposition to holders of LiLAC ordinary shares or redesignating LiLAC ordinary shares into Liberty Global ordinary shares, subject to the board's fiduciary duties.

In the event of a liquidation of Liberty Global, neither holders of Liberty Global ordinary shares nor holders of LiLAC ordinary shares will have priority with respect to the assets attributed to the respective group remaining for distribution to shareholders. Under our articles of association, upon Liberty Global's liquidation, dissolution or winding up, holders of the LiLAC ordinary shares will be entitled to receive, in respect of their respective shares, their proportionate interest in all of Liberty Global's assets, if any, remaining for distribution to holders of ordinary shares in proportion to their respective number of "liquidation units." Relative liquidation units were determined based on the volume weighted average prices of the Liberty Global ordinary shares and the LiLAC ordinary shares over the 20 trading-day period commencing shortly after the commencement of ordinary-course (regular-way) trading of the LiLAC Shares. Pursuant to the terms of our articles of association, the liquidation units for each Liberty Global Share and each LiLAC Share are 1 and 0.94893, respectively. Hence, the assets to be distributed to a holder of LiLAC ordinary shares upon a liquidation, dissolution or winding up of Liberty Global will not directly relate to the value of the assets attributed to the LiLAC Group and will not reflect changes in the relative value of the Liberty Global Group and the LiLAC Group over time. Holders of the Liberty Global ordinary shares may face similar considerations in the event of a liquidation in that any distribution to them upon a liquidation, dissolution or winding up may not directly relate to the value of the assets attributed to the Liberty Global Group and will not reflect changes to the relative values of the groups over time.

Holders of Liberty Global ordinary shares on all other matters. Holders of Liberty Global ordinary shares and LiLAC ordinary shares vote together as a single class, except in certain limited circumstances prescribed by our articles of association or as required by English law. Each Class B ordinary share of each group has ten votes, and each Class A ordinary share of each group has one vote. Holders of Class C ordinary shares of each group have no voting rights at general meetings of the company or meetings of all of the shares relating to one group. When holders of Liberty Global ordinary shares and LiLAC ordinary shares vote together as a single class, holders having a majority of the votes (or 75%, in the case of a vote requiring a special resolution) present and voting will be in a position to control the outcome of the vote even if the matter involves a conflict of interest among our shareholders or has a greater impact on one group than the other. As of February 4, 2016, holders of Liberty Global ordinary shares collectively directed approximately 95% of the aggregate voting power in our company, and holders of LiLAC ordinary shares collectively directed approximately 5% of the aggregate voting power in our company.

Our equity capital structure, as well as the fact that the LiLAC Group and the Liberty Global Group are not independent companies, may inhibit or prevent acquisition bids for either group and may make it difficult for a third party to acquire us, even if doing so may be beneficial to our shareholders. If the LiLAC Group and the Liberty Global Group were separate independent companies, any person interested in acquiring the LiLAC Group or the Liberty Global Group without negotiating with management could seek control of that group by obtaining control of its outstanding voting shares, by means of a tender offer, or by means of a scheme of arrangement. Although we intend for the LiLAC ordinary shares to reflect the separate economic performance of the LiLAC Group, neither the LiLAC Group nor the Liberty Global Group are separate entities, and a person interested in acquiring only one group without negotiating with our management could obtain control of that group only by obtaining control of a majority in voting power of all of the outstanding voting shares of our company. The existence of shares, and different classes of shares, relating to different groups could present complexities and in certain circumstances pose obstacles, financial and otherwise, to an acquiring person that are not present in companies that do not have capital structures similar to ours.

## **Other Factors**

The loss of certain key personnel could harm our business. We have experienced employees at both the corporate and operational levels who possess substantial knowledge of our business and operations. We cannot assure you that we will be successful in retaining their services or that we would be successful in hiring and training suitable replacements without undue costs or delays. As a result, the loss of any of these key employees could cause significant disruptions in our business operations, which could materially adversely affect our results of operations.

John C. Malone has significant voting power with respect to corporate matters considered by our shareholders. John C. Malone beneficially owns outstanding ordinary shares of Liberty Global representing 24.9% of our aggregate voting power as of February 4, 2016. By virtue of Mr. Malone's voting power in our company, as well as his position as Chairman of our board of directors, Mr. Malone may have significant influence over the outcome of any corporate transaction or other matters submitted to our shareholders for approval. For example, under English law and our articles of association, certain matters (including amendments to the articles of association) require the approval of 75% of the shareholders who vote (in person or by proxy) on the relevant resolution, and other certain corporate transactions or matters may require the approval of at least 75% of the outstanding shares of each class of our ordinary shares. Because Mr. Malone beneficially owns approximately 25% of our aggregate voting power and more than 75% of the outstanding Class B ordinary shares of each of the Liberty Global Group and the LiLAC Group, he has the ability to prevent the requisite approval threshold from being met even though the other shareholders may determine that such action or transaction is beneficial for the Company. Mr. Malone's rights to vote or dispose of his equity interests in our

company are not subject to any restrictions in favor of us other than as may be required by applicable law and except for customary transfer restrictions pursuant to equity award agreements.

It may be difficult for a third party to acquire us, even if doing so may be beneficial to our shareholders. Certain provisions of our articles of association and of English law may discourage, delay, or prevent a change in control of our company that a shareholder may consider favorable. These provisions include the following:

- authorizing a capital structure with multiple classes of ordinary shares: two tracking groups, each with a Class B that entitles the holders to 10 votes per share; a Class A that entitles the holders to one vote per share; and a Class C that, except as otherwise required by applicable law, entitles the holder to no voting rights;
- authorizing the issuance of "blank check" shares (both ordinary and preference), which could be issued by our board of directors to increase the number of outstanding shares and thwart a takeover attempt;
- classifying our board of directors with staggered three-year terms, which may lengthen the time required to gain control
  of our board of directors, although under English law, shareholders of our company can remove a director without cause
  by ordinary resolution;
- prohibiting shareholder action by written resolution, thereby requiring all shareholder actions to be taken at a meeting of the shareholders;
- requiring the approval of 75% in value of the shareholders (or class of shareholders) and/or English court approval for certain statutory mergers or schemes of arrangements; and
- establishing advance notice requirements for nominations of candidates for election to our board of directors or for proposing matters that can be acted upon by shareholders at shareholder meetings.

Change in control provisions in our incentive plan and related award agreements may also discourage, delay, or prevent a change in control of our company, even if such change of control would be in the best interests of our shareholders.

The enforcement of civil liabilities against us may be more difficult. Because we are a public limited company incorporated under the laws of England and Wales, investors could experience more difficulty enforcing judgments obtained against us in U.S. courts than would currently be the case for U.S. judgments obtained against a U.S. company. It may also be more difficult (or impossible) to bring some types of claims against us in courts sitting in England than it would be to bring similar claims against a U.S. company in a U.S. court. In particular, English law significantly limits the circumstances under which shareholders of English companies may bring derivative actions. Under English law generally, only the Company can be the proper plaintiff in proceedings in respect of wrongful acts committed against us. Our articles of association provide for the exclusive jurisdiction of the English courts for shareholder lawsuits against us or our directors.

## Item 1B. UNRESOLVED STAFF COMMENTS

None.

## **Item 2. PROPERTIES**

During 2015, we leased our corporate offices in London, U.K., in Englewood, Colorado, U.S. and in Amsterdam, the Netherlands. All of our other real or personal property is owned or leased by our subsidiaries and affiliates.

Our subsidiaries and affiliates own or lease the fixed assets necessary for the operation of their respective businesses, including office space, transponder space, headend facilities, rights of way, cable television and telecommunications distribution equipment, telecommunications switches and customer premises equipment and other property necessary for their operations. The physical components of their broadband networks require maintenance and periodic upgrades to support the new services and products they introduce. Subject to these maintenance and upgrade activities, our management believes that our current facilities are suitable and adequate for our business operations for the foreseeable future.

## **Item 3. LEGAL PROCEEDINGS**

From time to time, our subsidiaries and affiliates have become involved in litigation relating to claims arising out of their operations in the normal course of business. For additional information, see note 17 to our consolidated financial statements in Part II of this Annual Report on Form 10-K.

# **Item 4. MINE SAFTEY DISCLOSURES**

Not applicable.



## **PART II**

# Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED SHAREHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

## General

The capitalized terms used in Part II of this Annual Report on Form 10-K are defined in the notes to our consolidated financial statements. In the following text, the terms "we," "our," "our company" and "us" may refer, as the context requires, to Liberty Global or collectively to Liberty Global and its subsidiaries.

#### **Market Information**

Our share capital comprises Liberty Global Class A, Class B and Class C ordinary shares and LiLAC Class A, Class B and Class C ordinary shares. Our Liberty Global Class A, Class B and Class C and our LiLAC Class A and Class C ordinary shares trade on the NASDAQ Global Select Market under the symbols "LBTYA," "LBTYB," "LBTYK," "LILA" and "LILAK," respectively, and our LiLAC Class B ordinary shares trade on the OTC Link under the symbol "LILAB." The following table sets forth the range of high and low sales prices of Liberty Global Class A, Class B and Class C and LiLAC Class A, Class B and Class C ordinary shares for the periods indicated.

	Class A				Class B							
		High		Low		High		Low		High		Low
Liberty Global Shares / Old Liberty Global Shares (a):												
Year ended December 31, 2015												
First quarter	\$	55.63	\$	46.40	\$	54.85	\$	45.42	\$	53.38	\$	45.08
Second quarter	\$	58.48	\$	50.23	\$	56.81	\$	50.25	\$	54.41	\$	48.22
Third quarter	\$	54.47	\$	42.49	\$	56.70	\$	47.50	\$	51.10	\$	40.70
Fourth quarter	\$	46.40	\$	38.86	\$	47.09	\$	40.65	\$	44.54	\$	37.50
Year ended December 31, 2014												
First quarter	\$	46.78	\$	40.36	\$	46.74	\$	41.08	\$	44.26	\$	39.52
Second quarter	\$	45.61	\$	38.49	\$	46.07	\$	39.48	\$	43.59	\$	37.38
Third quarter	\$	44.93	\$	41.38	\$	46.91	\$	42.66	\$	43.35	\$	39.71
Fourth quarter	\$	51.99	\$	41.29	\$	53.00	\$	40.13	\$	49.92	\$	40.35
LiLAC Shares (a):												
Year ended December 31, 2015												
Third quarter	\$	50.00	\$	32.25	\$	48.80	\$	34.00	\$	48.90	\$	32.25
Fourth quarter	\$	41.37	\$	33.00	\$	39.98	\$	34.38	\$	43.00	\$	33.83

<sup>(</sup>a) On July 1, 2015, in connection with the issuance of LiLAC Shares pursuant to the LiLAC Transaction, we reclassified our then outstanding Old Liberty Global Shares into corresponding classes of Liberty Global Shares. Consistent with the treatment of the LiLAC Transaction in our consolidated financial statements, the share price information of Old Liberty Global Shares prior to July 1, 2015 has not been retroactively revised.

## Holders

The numbers of record holders of our ordinary shares as of February 4, 2016 are set forth below:

	Re	ecord Holders (a	a)
	Class A	Class B	Class C
Liberty Global Shares	100	9	170
LiLAC Shares	30	4	74

<sup>(</sup>a) Amounts do not include the number of shareholders whose shares are nominally held by banks, brokerage houses or other institutions, but include each such institution as one record holder.

## **Dividends**

We have not paid any cash dividends on any of our ordinary shares, and we have no present intention of doing so. Any future payment of cash dividends will be determined by our board of directors in light of our earnings, financial condition and other relevant considerations including applicable laws in England and Wales. Except as noted below, there are currently no contractual restrictions on our ability to pay dividends in cash or shares. The credit facilities to which certain of our subsidiaries are parties restrict our ability to access their cash for, among other things, our payment of cash dividends.

## Recent Sales of Unregistered Securities; Use of Proceeds from Registered Securities

None.

# **Issuer Purchase of Equity Securities**

The following table sets forth information regarding our company's purchase of its own equity securities during the three months ended December 31, 2015, all of which were purchases of Liberty Global Shares:

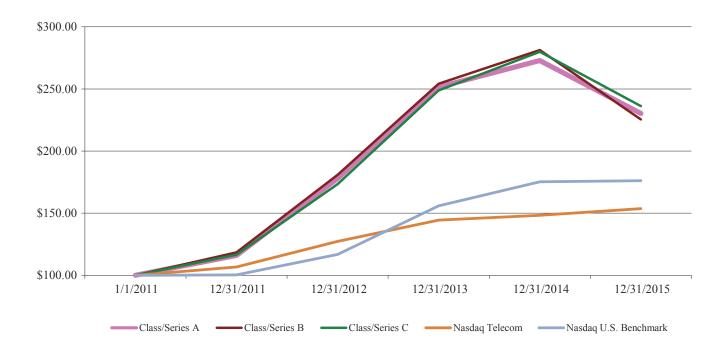
Period		umber of purchased	Averag paid per		purchase publicly	ber of shares d as part of announced programs	Approximate dollar value of shares that may yet be purchased under the plans or programs
October 1, 2015 through October 31, 2015	Class C:	7,435,247	Class C:	\$ 43.53	Class C:	7,435,247	(b)
November 1, 2015 through November 30, 2015	Class C:	7,257,875	Class C:	\$ 43.33	Class C:	7,257,875	(b)
December 1, 2015 through December 31, 2015	Class C:	6,017,608	Class C:	\$ 42.59	Class C:	6,017,608	(b)
Total — October 1, 2015 through December 31, 2015	Class C:	20,710,730	Class C:	\$ 43.19	Class C:	20,710,730	(b)

<sup>(</sup>a) Average price paid per share includes direct acquisition costs and the effects of derivative instruments, where applicable.

<sup>(</sup>b) As of December 31, 2015, the remaining amount authorized for share repurchases was \$1,601.1 million. Subsequent to December 31, 2015, our board of directors increased this amount to \$4.0 billion.

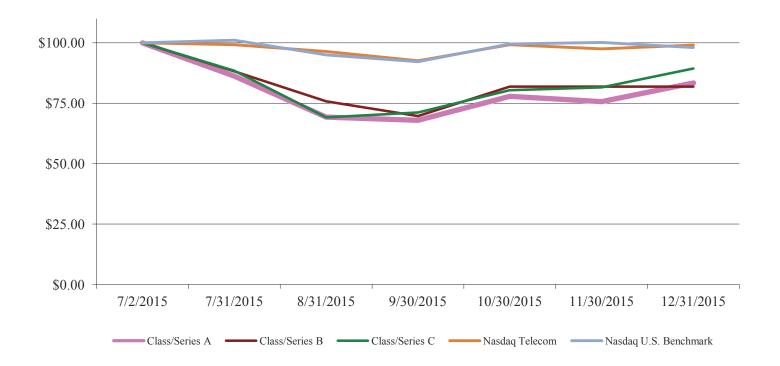
# **Stock Performance Graphs**

The following graph compares the changes in the cumulative total shareholder return on our Liberty Global Class A ordinary shares, Liberty Global Class B ordinary shares and Liberty Global Class C ordinary shares from January 1, 2011 to December 31, 2015, to the change in the cumulative total return on the ICB 6500 Telecommunications and the Nasdaq US Benchmark TR Index (assuming reinvestment of dividends, applicable). The performance presented below includes (i) the share prices of LGI's Series A, Series B and Series C common stock prior to the June 7, 2013 completion of the Virgin Media Acquisition and (ii) the retrospective impact of the July 1, 2015 LiLAC Transaction. The graph assumes that \$100 was invested on January 1, 2011.



	December 31,								
		2011		2012		2013	2014		2015
Liberty Global Shares - Class A	\$	115.97	\$	177.95	\$	251.55	\$	272.94	\$ 230.29
Liberty Global Shares - Class B	\$	118.41	\$	180.93	\$	254.28	\$	281.33	\$ 225.43
Liberty Global Shares - Class C	\$	116.61	\$	173.36	\$	248.81	\$	279.94	\$ 236.25
ICB 6500 Telecommunications	\$	106.72	\$	127.32	\$	144.38	\$	148.31	\$ 153.65
Nasdaq US Benchmark TR Index	\$	100.31	\$	116.79	\$	155.90	\$	175.33	\$ 176.17

The following graph compares the changes in the cumulative total shareholder return on our LiLAC Class A ordinary shares, LiLAC Class B ordinary shares and LiLAC Class C ordinary shares from July 2, 2015 (the day following the creation of the LiLAC Group tracking shares) to December 31, 2015, to the change in the cumulative total return on the ICB 6500 Telecommunications and the Nasdaq US Benchmark TR Index (assuming reinvestment of dividends, applicable). The graph assumes that \$100 was invested on July 2, 2015.



	 uly 31, 2015	 gust 31, 2015	September 30, 2015		October 31, 2015		,		,		No	vember 30, 2015	Dec	ember 31, 2015
LiLAC Shares - Class A	\$ 86.19	\$ 69.28	\$	67.91	\$	77.85	\$	75.69	\$	83.39				
LiLAC Shares - Class B (a)	\$ 88.22	\$ 75.82	\$	69.67	\$	81.93	\$	81.93	\$	81.93				
LiLAC Shares - Class C	\$ 88.46	\$ 69.13	\$	71.19	\$	80.37	\$	81.54	\$	89.40				
ICB 6500 Telecommunications	\$ 99.23	\$ 96.39	\$	92.58	\$	99.27	\$	97.50	\$	99.06				
Nasdaq US Benchmark TR Index	\$ 101.11	\$ 95.00	\$	92.22	\$	99.56	\$	100.13	\$	98.05				

<sup>(</sup>a) Trading data is limited for Class B LiLAC Shares, as such shares are thinly traded.

## Item 6. SELECTED FINANCIAL DATA

The following tables present selected historical financial information of Liberty Global and its consolidated subsidiaries. The following selected financial data was derived from our consolidated financial statements as of and for the years ended December 31, 2015, 2014, 2013, 2012 and 2011. This information is only a summary and should be read together with our *Management's Discussion and Analysis of Financial Condition and Results of Operations* and consolidated financial statements included elsewhere herein.

				De	cember 31,			
	2015		2014		2013		2012	2011
				iı	n millions			
Summary Balance Sheet Data (a):								
Property and equipment, net	\$ 21,684.0	\$	23,840.6	\$	23,974.9	\$	13,437.6	\$ 12,868.4
Goodwill	\$ 27,020.4	\$	29,001.6	\$	23,748.8	\$	13,877.6	\$ 13,289.3
Total assets	\$ 67,867.2	\$	72,841.9	\$	67,714.3	\$	38,307.7	\$ 36,409.2
Debt and capital lease obligations, including current portion	\$ 47,057.3	\$	46,159.0	\$	44,704.3	\$	27,524.5	\$ 24,757.9
Total equity	\$ 10,174.3	\$	14,116.0	\$	11,541.5	\$	2,085.1	\$ 2,931.4
	 2015		Year 2014	end	led December 2013	er 3	1, 2012	 2011
	 	_		exc	cept per shar	re a		 
Summary Statement of Operations Data (a):			,	0.20	cpt per sim			
Revenue	\$ 18,280.0	\$	18,248.3	\$	14,474.2	\$	9,930.8	\$ 9,118.3
Operating income	\$ 2,349.2	\$	2,228.2	\$	2,012.1	\$	1,983.1	\$ 1,822.9
Loss from continuing operations (b)	\$ (1,049.5)	\$	(980.9)	\$	(882.0)	\$	(583.9)	\$ (801.5)
Loss from continuing operations attributable to Liberty Global shareholders	\$ (1,152.5)	\$	(1,028.5)	\$	(937.6)	\$	(623.7)	\$ (841.0)
Basic and diluted earnings (loss) from continuing operations attributable to Liberty Global shareholders per share:								
Liberty Global Shares (c)	\$ (0.19)							
LiLAC Shares (c)	\$ 0.39							
Old Liberty Global Shares (d)	\$ (1.13)	\$	(1.29)	\$	(1.39)	\$	(1.17)	\$ (1.59)

<sup>(</sup>a) We acquired Choice on June 3, 2015, Ziggo on November 11, 2014, Virgin Media on June 7, 2013, OneLink on November 8, 2012, Unitymedia BW GmbH (formerly known as Kabel BW GmbH) (**KBW**) on December 15, 2011 and Aster Sp. z.o.o. on September 16, 2011. We also completed a number of less significant acquisitions during the years presented. We sold the Chellomedia Disposal Group on January 31, 2014 and Austar United Communications Limited (**Austar**) on May 23, 2012. Accordingly, our summary statement of operations data presents the Chellomedia Disposal Group and Austar as discontinued operations during the applicable periods. For information regarding our acquisitions and dispositions during the past three years, see notes 4 and 5 to our consolidated financial statements.

<sup>(</sup>b) Includes earnings from continuing operations attributable to noncontrolling interests of \$103.0 million, \$47.6 million, \$55.6 million, \$39.8 million and \$39.5 million, respectively.

<sup>(</sup>c) The amounts presented for 2015 relate to the period from July 1, 2015 through December 31, 2015.

<sup>(</sup>d) The amount presented for 2015 relates to the period from January 1, 2015 through June 30, 2015.

# Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis, which should be read in conjunction with our consolidated financial statements, is intended to assist in providing an understanding of our results of operations and financial condition and is organized as follows:

- Overview. This section provides a general description of our business and recent events.
- Results of Operations. This section provides an analysis of our results of operations for the years ended December 31, 2015, 2014 and 2013.
- Liquidity and Capital Resources. This section provides an analysis of our corporate and subsidiary liquidity, consolidated statements of cash flows and contractual commitments.
- Critical Accounting Policies, Judgments and Estimates. This section discusses those material accounting policies that contain uncertainties and require significant judgment in their application.
- Quantitative and Qualitative Disclosures about Market Risk. This section provides discussion and analysis of the foreign currency, interest rate and other market risk that our company faces.

Unless otherwise indicated, convenience translations into U.S. dollars are calculated, and operational data (including subscriber statistics) are presented, as of December 31, 2015.

## Overview

We are an international provider of video, broadband internet, fixed-line telephony and mobile services, with consolidated operations at December 31, 2015 in 14 countries. Through Virgin Media, we provide video, broadband internet, fixed-line telephony and mobile services in the U.K. and Ireland. Through Ziggo Group Holding, Unitymedia and Telenet, we provide video, broadband internet, fixed-line telephony and mobile services in the Netherlands, Germany and Belgium, respectively. Through UPC Holding, we provide (i) video, broadband internet and fixed-line telephony services in seven other European countries and (ii) mobile services in four other European countries. The operations of Virgin Media, Ziggo Group Holding, Unitymedia, Telenet and UPC Holding are collectively referred to herein as the "European Operations Division." In Chile, we provide video, broadband internet, fixed-line telephony and mobile services through VTR. In Puerto Rico, we provide video, broadband internet and fixed-line telephony services through Liberty Puerto Rico.

On July 1, 2015, we completed the LiLAC Transaction, pursuant to which we (i) reclassified our then outstanding Old Liberty Global Shares into Liberty Global Shares and (ii) distributed LiLAC Shares to holders of our Old Liberty Global Shares. The Liberty Global Shares are intended to reflect or "track" the economic performance of the Liberty Global Group and the LiLAC Group, respectively. For additional information, see note 1 to our consolidated financial statements.

Our analog video service offerings include basic programming and, in some markets, expanded basic programming. We tailor both our basic channel line-up and our additional channel offerings to each market according to culture, demographics, programming preferences and local regulation. Our digital video service offerings include basic and premium programming and incremental product and service offerings such as enhanced pay-per-view programming (including video-on-demand or "VoD"), digital video recorders and high definition programming.

We have launched "Horizon TV" in the Netherlands, Switzerland, Ireland and Germany and cloud-based Horizon TV in Poland and the Czech Republic, and during 2016, we expect to launch Horizon TV products in Austria, Chile and certain markets in our Central and Eastern Europe segment. In the U.K. and Belgium, we offer interactive digital television platforms that are comparable to Horizon TV under the brand names "Tivo" and "Digital TV", respectively. Horizon TV is a family of media products that allows customers to view and share content across the television, computer, tablet and smart phone. Horizon TV is powered by a user interface that provides customers with a seamless and intuitive way to access linear, time-shifted (including "Replay TV"), on-demand and web-based content on the television. It also features an advanced set-top box that delivers not only video, but also internet and voice connections along with a wireless network for the home. The Horizon family of products also includes "Horizon Go" (or "TV Anywhere" in the U.K. and "Yelo Play" in Belgium), an online television app for viewing on a second screen that allows video customers to view linear channels, with many channels available outside of the home. Horizon Go also offers access to VoD and, for Horizon TV customers, the second screen devices also act as an in-home remote control. Using the Horizon Go app, customers in certain markets can watch Replay TV, which provides access to programs from the past seven days on their smart phones or laptops. We expect to expand the availability of Replay TV to additional markets during 2016. In addition, we have launched our subscriber-video-on-demand offering, which we refer to as "MyPrime", in many of our markets. MyPrime

is a subscription-based on-demand video library that allows customers to choose from several thousand classic films, children's programs, series and documentaries.

Although our digital television signals are encrypted in many of the countries in which we operate, our basic digital television channels in the Netherlands, Germany, Switzerland, Austria, Romania, the Czech Republic, Poland and Hungary are unencrypted. Where our basic digital television channels are unencrypted, subscribers who have the necessary equipment and who pay the monthly subscription fee for our analog package are able to watch our basic digital television channels. Regardless of whether basic digital television channels are offered on an unencrypted basis, expanded channel packages and premium channels and services continue to be available for an incremental monthly fee in all of our markets. In markets where we introduce unencryption, we generally expect to experience a positive impact on our subscriber disconnect levels and a somewhat negative impact on demand for lower tiers of digital video services.

We offer broadband internet services in all of our broadband communications markets. Our residential subscribers and B2B customers generally access the internet at various download speeds ranging up to 500 Mbps, depending on the market and the tier of service selected. We determine pricing for each tier of broadband internet service through analysis of speed, market conditions and other factors.

We offer fixed-line telephony services in all of our broadband communications markets, primarily using voice-over-internet-protocol or "VoIP" technology. In addition, we offer mobile services using third-party networks in most of our markets.

Most of our operations also provide B2B services, including voice, broadband internet, data, video, wireless and cloud services.

We have completed a number of transactions that impact the comparability of our 2015, 2014 and 2013 results of operations, including the Choice Acquisition on June 3, 2015, the Ziggo Acquisition on November 11, 2014, the Virgin Media Acquisition on June 7, 2013 and a number of less significant acquisitions during 2015, 2014 and 2013.

On January 31, 2014, we completed the Chellomedia Transaction and, accordingly, the Chellomedia Disposal Group is presented as a discontinued operation in our consolidated financial statements for all applicable periods. In the following discussion and analysis, the operating statistics, results of operations, cash flows and financial condition that we present and discuss are those of our continuing operations, unless otherwise indicated.

For further information regarding our pending and completed acquisitions and our dispositions, see notes 4, 5 and 20 to our consolidated financial statements.

Through our subsidiaries and affiliates, we are the largest international broadband communications operator in terms of customers. At December 31, 2015, we owned and operated networks that passed 53,392,100 homes and served 57,047,900 revenue generating units (**RGU**s), consisting of 24,046,000 video subscribers, 18,120,400 broadband internet subscribers and 14,881,500 fixed-line telephony subscribers. In addition, at December 31, 2015, we served 4,787,000 mobile subscribers.

During the first quarter of 2015, we modified certain video subscriber definitions to better align these definitions with the underlying services received by our subscribers and have replaced our "analog cable" and "digital cable" subscriber definitions with "basic video" and "enhanced video," respectively. A basic video subscriber receives our video service via an analog video signal or a digital video signal without subscribing to any recurring monthly service that requires the use of encryption-enabling technology. An enhanced video subscriber receives our video service via a digital video signal while subscribing to any recurring monthly service that requires the use of encryption-enabling technology.

Including the effect of acquisitions, we added a total of 1,097,300 RGUs during 2015. Excluding the effect of acquisitions (RGUs added on the acquisition date), but including post-acquisition date RGU additions, we added 869,900 RGUs on an organic basis during 2015, as compared to 1,278,900 RGUs added on an organic basis during 2014. The organic RGU growth during 2015 is primarily attributable to the net effect of (i) an increase of 734,000 broadband internet RGUs, (ii) a decrease of 606,100 basic video RGUs, (iii) an increase of 528,300 fixed-line telephony RGUs and (iv) an increase of 175,700 enhanced video RGUs. In addition, excluding the effect of acquisitions, we added 267,600 mobile subscribers during 2015, including an increase in postpaid mobile subscribers of 464,300 and a decrease in prepaid mobile subscribers of 196,700.

We are experiencing significant competition from incumbent telecommunications operators (particularly in the Netherlands and, to a lesser extent, Switzerland, where the incumbent telecommunications operators are overbuilding our networks with fiber-to-the-home, -cabinet, -building or -node and advanced digital subscriber line technologies), DTH operators and/or other providers in all of our broadband communications markets. In certain of our markets, this significant competition, together with the maturation of these markets, has contributed to organic declines in revenue, RGUs and/or average monthly subscription revenue per average cable RGU or mobile subscriber, as applicable (ARPU), the more notable of which include:

- (i) organic declines in cable subscription and overall revenue in the Netherlands during the fourth quarter of 2015, as compared to the fourth quarter of 2014;
- (ii) organic declines during the fourth quarter of 2015 in (a) video RGUs in the majority of our markets, as declines in our basic video RGUs generally exceeded additions to our enhanced video RGUs (including migrations from basic video) in these markets, (b) fixed-line telephony RGUs in Chile and the Netherlands and (c) total RGUs in the Netherlands and Switzerland/Austria; and
- (iii) organic declines in overall cable ARPU in many of our markets during the fourth quarter of 2015, as compared to the fourth quarter of 2014.

In addition to competition, our operations are subject to macroeconomic and political risks that are outside of our control. For example, high levels of sovereign debt in the U.S. and several European countries in which we operate, combined with weak growth and high unemployment, could potentially lead to fiscal reforms (including austerity measures), tax increases, sovereign debt restructurings, currency instability, increased counterparty credit risk, high levels of volatility and disruptions in the credit and equity markets, as well as other outcomes that might adversely impact our company. Given our significant exposure to the euro, the occurrence of any of these events within the eurozone countries could have an adverse impact on, among other matters, our liquidity and cash flows.

Concerns also exist with respect to the Puerto Rico government's cash flows and, accordingly, its ability to meet its debt obligations. For example, the Puerto Rico government failed to make bond payments of \$58 million in August 2015 and \$36 million in January 2016. Before the first payment default, the Puerto Rico government enacted a new tax law that, among other things, (i) increased the sales and use tax rate from 7.0% to 11.5%, effective July 1, 2015, and (ii) provided for the taxing of services between businesses at a rate of 4%, effective October 1, 2015. Effective April 1, 2016, the aforementioned sales and use tax will be replaced with a VAT of 10.5% and a sales and use tax of 1.0%. Prior to the new tax law, such services were exempt from taxation. More changes to the Puerto Rico tax system are expected during 2016. Puerto Rico's government is also currently implementing austerity and a number of other measures to improve its solvency. It remains possible, if not likely, that Puerto Rico will be required to restructure its debt obligations to remain solvent. If the fiscal and economic conditions in Puerto Rico were to worsen as a result of these or other factors, (a) the population of Puerto Rico could continue to decline, reducing the future demand for Liberty Puerto Rico's services, and (b) the demand and ability of customers to pay for Liberty Puerto Rico's services could be impaired, which could have a negative impact on Liberty Puerto Rico's results of operations, cash flows and financial condition.

The video, broadband internet and fixed-line telephony businesses in which we operate are capital intensive. In order to add customers to our broadband networks and enhance our service offerings, we make significant investments in property and equipment to upgrade and extend our broadband communications networks and improve our customer premises equipment. Significant competition, the introduction of new technologies, the expansion of existing technologies such as fiber-to-the-home/-cabinet/-building/-node and advanced digital subscriber line technologies, or adverse regulatory developments could cause us to decide to undertake previously unplanned upgrades of our networks and customer premises equipment in impacted markets. In addition, no assurance can be given that any future upgrades will generate a positive return or that we will have adequate capital available to finance such future upgrades. If we are unable to, or elect not to, pay for costs associated with adding new customers, expanding or upgrading our networks, or making our other planned or unplanned additions to our property and equipment, our growth could be limited and our competitive position could be harmed.

We rely on third-party vendors for the equipment, software and services that we require in order to provide services to our customers. Our suppliers often conduct business worldwide and their ability to meet our needs is subject to various risks, including political and economic instability, natural calamities, interruptions in transportation systems, terrorism and labor issues. As a result, we may not be able to obtain the equipment, software and services required for our businesses on a timely basis or on satisfactory terms. Any shortfall in customer premises equipment could lead to delays in connecting customers to our services and, accordingly, could adversely impact our ability to maintain or increase our RGUs, revenue and cash flows.

From a strategic perspective, we are seeking to build broadband communications and mobile businesses that have strong prospects for future growth in revenue, Adjusted OIBDA and free cash flow (as defined below under *Liquidity and Capital* 

Resources — Free Cash Flow). As discussed further under Liquidity and Capital Resources — Capitalization below, we also seek to maintain our debt at levels that provide for attractive equity returns without assuming undue risk.

We strive to achieve organic revenue and customer growth in our operations by developing and marketing bundled entertainment and information and communications services, and extending and upgrading the quality of our networks where appropriate. As we use the term, organic growth excludes foreign currency translation effects (**FX**) and the estimated impact of acquisitions. While we seek to obtain new customers, we also seek to maximize the average revenue we receive from each household by increasing the penetration of our digital video, broadband internet, fixed-line telephony and mobile services with existing customers through product bundling and upselling.

During 2015, we initiated our "Liberty 3.0" program, which is a comprehensive plan to drive top-line growth while maintaining tight cost controls. The Liberty 3.0 program seeks to capitalize on revenue opportunities associated with Network Extensions (as defined and described below), mobile and B2B, together with the realization of greater efficiencies by leveraging our scale more effectively. Underpinning this program is a commitment to customer centricity, which we believe is key to succeeding in an ever more demanding consumer market. We expect this transformation to occur over the next several years and, as with any program of this magnitude, the benefits are expected to materialize over time. We believe that the successful implementation of Liberty 3.0 will, beginning in 2017, lead to consolidated organic growth rates for revenue and Adjusted OIBDA that are meaningfully higher than our recent consolidated organic growth rates. We expect our revenue and Adjusted OIBDA growth to come primarily from (i) organic increases in RGUs, due in large part to the Network Extensions, (ii) increases in ARPU per customer, (iii) growth in B2B and mobile services and (iv) in the case of our Adjusted OIBDA growth rates, cost savings and efficiencies that are expected to largely offset the incremental costs that we will incur as a result of a larger subscriber base. As further discussed below, we expect the percentage of revenue represented by our property and equipment additions to increase during this period as a result of the Network Extensions.

During 2015, we initiated a network extension program in the U.K. (the **U.K. Network Extension**) pursuant to which we may connect up to an estimated four million additional homes and businesses to Virgin Media's broadband communications network by the end of 2019. In addition, we plan to pursue similar opportunities in Central and Eastern Europe, Germany, Chile and certain other markets, pursuant to which we may connect up to an estimated six million homes to our networks in these markets through 2019 (together with the U.K. Network Extension, the **Network Extensions**). The additional premises that we expect to connect pursuant to the Network Extensions were identified through a detailed review of our existing network in these markets and were selected based on our assessment that attractive returns could be achieved. The Network Extensions will be completed in phases and will initially focus on the most accretive expansion opportunities. Depending on a variety of factors, including the financial and operational results of the earlier phases of the programs, any of the Network Extensions may be modified or cancelled at our discretion.

The capital costs associated with the Network Extensions, which include the costs to build-out the networks and the purchase and installation of related customer premises equipment, are expected to be significant. Based on our most recent long-range plan, which excludes BASE and CWC, and including the aggregate impact on our revenue and property and equipment additions of the Network Extensions, we expect that the percentage of revenue represented by our aggregate consolidated property and equipment additions will range from 25% to 28% during the three years ended December 31, 2018.

Our assessment of the impacts of the Liberty 3.0 program (including the impacts of the Network Extensions) are subject to competitive, economic, regulatory and other factors outside of our control and no assurance can be given that we will be successful in delivering growth rates that are meaningfully higher than our recent consolidated organic growth rates for revenue and Adjusted OIBDA.

For additional information regarding our property and equipment additions, including our expectations for 2016, see *Liquidity* and Capital Resources — Consolidated Statements of Cash Flows below.

## **Results of Operations**

As noted under Overview above, the comparability of our operating results during 2015, 2014 and 2013 is affected by acquisitions. In the following discussion, we quantify the estimated impact of acquisitions on our operating results. The acquisition impact represents our estimate of the difference between the operating results of the periods under comparison that is attributable to an acquisition. In general, we base our estimate of the acquisition impact on an acquired entity's operating results during the first three months following the acquisition date such that changes from those operating results in subsequent periods are considered to be organic changes. Accordingly, in the following discussion, variances attributed to an acquired entity during the first 12 months following the acquisition date represent differences between the estimated acquisition impact and the actual results. Our organic growth percentages may be impacted by the fact that the numerator for the organic growth percentages includes the organic growth of the acquired entity, while the denominator may not include any amounts related to the acquired entity. Normally, any such impacts would not be significant, however, due to the size of the Virgin Media Acquisition, our consolidated organic growth rates for 2014, as compared to 2013, are significantly different from the growth rates we would have reported if we had excluded Virgin Media's organic growth from these organic growth rate calculations. Accordingly, to provide an additional perspective on (i) the growth of the components of our consolidated revenue and (ii) changes in our operating expenses, SG&A expenses and Adjusted OIBDA for such periods, we present (a) organic revenue growth rates that exclude Virgin Media's organic growth in a note to our consolidated product revenue table included under Discussion and Analysis of our Consolidated Operating Results and (b) the organic changes of our consolidated operating expenses, SG&A expenses and Adjusted OIBDA excluding the impact of Virgin Media in a note to the respective tables that are included in *Discussion and Analysis of our Reportable Segments*.

Changes in foreign currency exchange rates have a significant impact on our reported operating results as all of our operating segments, except for Puerto Rico, have functional currencies other than the U.S. dollar. Our primary exposure to FX risk during the three months ended December 31, 2015 was to the euro and British pound sterling as 43.8% and 37.0% of our U.S. dollar revenue during the period was derived from subsidiaries whose functional currencies are the euro and British pound sterling, respectively. In addition, our reported operating results are impacted by changes in the exchange rates for the Swiss franc and other local currencies in Europe, as well as the Chilean peso. The portions of the changes in the various components of our results of operations that are attributable to changes in FX are highlighted under *Discussion and Analysis of our Reportable Segments* and *Discussion and Analysis of our Consolidated Operating Results* below. For information concerning our foreign currency risks and the applicable foreign currency exchange rates in effect for the periods covered by this Annual Report on Form 10-K, see *Quantitative and Qualitative Disclosures about Market Risk* — *Foreign Currency Risk* below.

The amounts presented and discussed below represent 100% of each operating segment's revenue and Adjusted OIBDA. As we have the ability to control Telenet and Liberty Puerto Rico, we consolidate 100% of the revenue and expenses of these entities in our consolidated statements of operations despite the fact that third parties own significant interests in these entities. The noncontrolling owners' interests in the operating results of Telenet, Liberty Puerto Rico and other less significant majority-owned subsidiaries are reflected in net earnings or loss attributable to noncontrolling interests in our consolidated statements of operations.

## Discussion and Analysis of our Reportable Segments

## General

All of the reportable segments set forth below derive their revenue primarily from broadband communications services, including video, broadband internet and fixed-line telephony services. Most of our reportable segments also provide B2B and mobile services. For detailed information regarding the composition of our reportable segments, including information regarding a change to our reportable segments that we made during the second quarter of 2015, see note 18 to our consolidated financial statements.

The tables presented below in this section provide a separate analysis of each of the line items that comprise Adjusted OIBDA, as further discussed in note 18 to our consolidated financial statements, as well as an analysis of Adjusted OIBDA by reportable segment for (i) 2015, as compared to 2014, and (ii) 2014, as compared to 2013. These tables present (a) the amounts reported by each of our reportable segments for the current and comparative periods, (b) the U.S. dollar change and percentage change from period to period and (c) the organic percentage change from period to period (percentage change after removing FX and the estimated impacts of acquisitions and dispositions). The comparisons that exclude FX assume that exchange rates remained constant at the prior year rate during the comparative periods that are included in each table. As discussed under *Quantitative and Qualitative Disclosures about Market Risk*—Foreign Currency Risk below, we have significant exposure to movements in foreign currency exchange rates. We also provide a table showing the Adjusted OIBDA margins of our reportable segments for 2015, 2014 and 2013 at the end of this section.

The revenue of our reportable segments includes revenue earned from (i) subscribers to our broadband communications and mobile services and (ii) B2B services, interconnect fees, mobile handset sales, channel carriage fees, installation fees, late fees, and advertising revenue. Consistent with the presentation of our revenue categories in note 18 to our consolidated financial statements, we use the term "subscription revenue" in the following discussion to refer to amounts received from subscribers for ongoing services, excluding installation fees and late fees. In the following tables, mobile subscription revenue excludes the related interconnect revenue.

Most of our revenue is derived from jurisdictions that administer VAT or similar revenue-based taxes. Any increases in these taxes could have an adverse impact on our ability to maintain or increase our revenue to the extent that we are unable to pass such tax increases on to our customers. In the case of revenue-based taxes for which we are the ultimate taxpayer, we will also experience increases in our operating expenses and corresponding declines in our Adjusted OIBDA and Adjusted OIBDA margins to the extent of any such tax increases.

We pay interconnection fees to other telephony providers when calls or text messages from our subscribers terminate on another network, and we receive similar fees from such providers when calls or text messages from their customers terminate on our networks or networks that we access through MVNO or other arrangements. The amounts we charge and incur with respect to fixed-line telephony and mobile interconnection fees are subject to regulatory oversight in many of our markets. To the extent that regulatory authorities introduce fixed-line or mobile termination rate changes, we would experience prospective changes and, in very limited cases, we could experience retroactive changes in our interconnect revenue and/or costs. The ultimate impact of any such changes in termination rates on our Adjusted OIBDA would be dependent on the call or text messaging patterns that are subject to the changed termination rates.

# Revenue of our Reportable Segments

Revenue — 2015 compared to 2014

	Year ended I	December 31,	Increase (	decrease)	Organic increase (decrease)
	2015	2014	\$	%	%
		in millions			
Liberty Global Group:					
European Operations Division:					
U.K./Ireland	\$ 7,058.7	\$ 7,409.9	\$ (351.2)	(4.7)	3.9
The Netherlands (a) (b)	2,745.3	1,498.5	1,246.8	83.2	(4.6)
Germany	2,399.5	2,711.5	(312.0)	(11.5)	5.9
Belgium	2,021.0	2,279.4	(258.4)	(11.3)	6.1
Switzerland/Austria	1,758.2	1,846.1	(87.9)	(4.8)	2.8
Total Western Europe	15,982.7	15,745.4	237.3	1.5	3.6
Central and Eastern Europe	1,066.6	1,259.5	(192.9)	(15.3)	1.3
Central and other	(5.4)	(7.1)	1.7	N.M.	N.M.
Total European Operations Division	17,043.9	16,997.8	46.1	0.3	3.4
Corporate and other	42.3	70.8	(28.5)	(40.3)	(10.6)
Intersegment eliminations	(23.5)	(24.9)	1.4	N.M.	N.M.
Total Liberty Global Group	17,062.7	17,043.7	19.0	0.1	3.4
LiLAC Group:					
Chile	838.1	898.5	(60.4)	(6.7)	6.9
Puerto Rico (b) (c)	379.2	306.1	73.1	23.9	6.7
Total LiLAC Group	1,217.3	1,204.6	12.7	1.1	6.8
Total	\$ 18,280.0	\$ 18,248.3	\$ 31.7	0.2	3.6

<sup>(</sup>a) The amount presented for 2014 includes the post-acquisition revenue of Ziggo from November 12, 2014 through December 31, 2014.

## N.M. — Not Meaningful.

*General.* While not specifically discussed in the below explanations of the changes in the revenue of our reportable segments, we are experiencing significant competition in all of our broadband communications markets. This competition has an adverse impact on our ability to increase or maintain our RGUs and/or ARPU. For a description of the more notable recent impacts of this competition on our broadband communications markets, see *Overview* above.

Variances in the subscription revenue that we receive from our customers are a function of (i) changes in the number of RGUs or mobile subscribers outstanding during the period and (ii) changes in ARPU. Changes in ARPU can be attributable to (a) price increases, (b) changes in bundling or promotional discounts, (c) changes in the tier of services selected, (d) variances in subscriber usage patterns and (e) the overall mix of cable and mobile products within a segment during the period. In the following discussion, we provide the net impact of the above factors on the ARPU that is derived from our video, broadband internet, fixed-line telephony and mobile products.

<sup>(</sup>b) As further described under *Results of Operations* above, our organic growth rates are impacted by the methodology we use to estimate the impact of an acquisition. This impact is more pronounced in the Netherlands, where the acquired company (Ziggo) is significantly larger than our legacy operations in the Netherlands.

<sup>(</sup>c) The amount presented for 2015 includes the post-acquisition revenue of Choice, which was acquired on June 3, 2015.

*U.K./Ireland.* The decrease in U.K./Ireland's revenue during 2015, as compared to 2014, includes (i) an organic increase of \$287.9 million or 3.9%, (ii) the impact of acquisitions, (iii) the impact of a disposal and (iv) the impact of FX, as set forth below:

Increase in cable subscription revenue due to change in:           Average number of RGUs (a).         \$ 84.1         \$ —         \$ 84.1           ARPU (b).         57.7         —         57.7           Total increase in cable subscription revenue.         141.8         —         141.8           Decrease in mobile subscription revenue (c).         (24.4)         —         (24.4)           Total increase in subscription revenue.         117.4         —         117.4           Increase in B2B revenue (d).         —         64.7         64.7           Increase in other non-subscription revenue (e).         —         105.8         105.8           Total organic increase.         117.4         170.5         287.9           Impact of acquisitions.         0.4         8.6         9.0           Impact of a disposal (f).         —         (50.0)         (50.0)           Impact of FX.         (483.7)         (114.4)         (598.1)           Total         —         (365.9)         \$ 14.7         \$ (351.2)		oscription evenue		Non- bscription revenue	Total
Average number of RGUs (a)       \$ 84.1       \$ - \$ 84.1         ARPU (b)       57.7       - 57.7         Total increase in cable subscription revenue       141.8       - 141.8         Decrease in mobile subscription revenue (c).       (24.4)       - (24.4)         Total increase in subscription revenue       117.4       - 117.4         Increase in B2B revenue (d).       - 64.7       64.7         Increase in other non-subscription revenue (e).       - 105.8       105.8         Total organic increase.       117.4       170.5       287.9         Impact of acquisitions.       0.4       8.6       9.0         Impact of a disposal (f).       - (50.0)       (50.0)         Impact of FX       (483.7)       (114.4)       (598.1)			in	millions	
ARPU (b)       57.7       —       57.7         Total increase in cable subscription revenue       141.8       —       141.8         Decrease in mobile subscription revenue (c)       (24.4)       —       (24.4)         Total increase in subscription revenue       117.4       —       117.4         Increase in B2B revenue (d)       —       64.7       64.7         Increase in other non-subscription revenue (e)       —       105.8       105.8         Total organic increase       117.4       170.5       287.9         Impact of acquisitions       0.4       8.6       9.0         Impact of a disposal (f)       —       (50.0)       (50.0)         Impact of FX       (483.7)       (114.4)       (598.1)	Increase in cable subscription revenue due to change in:				
Total increase in cable subscription revenue       141.8       —       141.8         Decrease in mobile subscription revenue (c)       (24.4)       —       (24.4)         Total increase in subscription revenue       117.4       —       117.4         Increase in B2B revenue (d)       —       64.7       64.7         Increase in other non-subscription revenue (e)       —       105.8       105.8         Total organic increase       117.4       170.5       287.9         Impact of acquisitions       0.4       8.6       9.0         Impact of a disposal (f)       —       (50.0)       (50.0)         Impact of FX       (483.7)       (114.4)       (598.1)	Average number of RGUs (a)	\$ 84.1	\$	_	\$ 84.1
Decrease in mobile subscription revenue (c)         (24.4)         — (24.4)           Total increase in subscription revenue         117.4         — 117.4           Increase in B2B revenue (d)         — 64.7         64.7           Increase in other non-subscription revenue (e)         — 105.8         105.8           Total organic increase         117.4         170.5         287.9           Impact of acquisitions         0.4         8.6         9.0           Impact of a disposal (f)         — (50.0)         (50.0)           Impact of FX         (483.7)         (114.4)         (598.1)	ARPU (b)	57.7			57.7
Total increase in subscription revenue       117.4       —       117.4         Increase in B2B revenue (d)       —       64.7       64.7         Increase in other non-subscription revenue (e)       —       105.8       105.8         Total organic increase       117.4       170.5       287.9         Impact of acquisitions       0.4       8.6       9.0         Impact of a disposal (f)       —       (50.0)       (50.0)         Impact of FX       (483.7)       (114.4)       (598.1)	Total increase in cable subscription revenue	141.8			141.8
Increase in B2B revenue (d)       —       64.7       64.7         Increase in other non-subscription revenue (e)       —       105.8       105.8         Total organic increase       117.4       170.5       287.9         Impact of acquisitions       0.4       8.6       9.0         Impact of a disposal (f)       —       (50.0)       (50.0)         Impact of FX       (483.7)       (114.4)       (598.1)	Decrease in mobile subscription revenue (c)	(24.4)			(24.4)
Increase in other non-subscription revenue (e)         —         105.8         105.8           Total organic increase         117.4         170.5         287.9           Impact of acquisitions         0.4         8.6         9.0           Impact of a disposal (f)         —         (50.0)         (50.0)           Impact of FX         (483.7)         (114.4)         (598.1)	Total increase in subscription revenue.	117.4			117.4
Total organic increase         117.4         170.5         287.9           Impact of acquisitions         0.4         8.6         9.0           Impact of a disposal (f)         —         (50.0)         (50.0)           Impact of FX         (483.7)         (114.4)         (598.1)	Increase in B2B revenue (d)			64.7	64.7
Impact of acquisitions       0.4       8.6       9.0         Impact of a disposal (f)       —       (50.0)       (50.0)         Impact of FX       (483.7)       (114.4)       (598.1)	Increase in other non-subscription revenue (e)			105.8	105.8
Impact of a disposal (f)       —       (50.0)       (50.0)         Impact of FX       —       (483.7)       (114.4)       (598.1)	Total organic increase	117.4		170.5	287.9
Impact of FX	Impact of acquisitions	0.4		8.6	9.0
<u> </u>	Impact of a disposal (f)			(50.0)	(50.0)
Total	Impact of FX	(483.7)		(114.4)	(598.1)
	Total	\$ (365.9)	\$	14.7	\$ (351.2)

- (a) The increase in cable subscription revenue related to a change in the average number of RGUs is attributable to an increase in the average numbers of broadband internet and fixed-line telephony RGUs that was only partially offset by a decline in (i) the average number of enhanced video RGUs and (ii) the average number of basic and multi-channel multi-point (microwave) distribution system (MMDS) video RGUs in Ireland.
- (b) The increase in cable subscription revenue related to a change in ARPU is primarily attributable to the net effect of (i) a net increase primarily due to (a) higher ARPU from broadband internet services in the U.K., (b) lower ARPU from fixed-line telephony services and (c) higher ARPU from video services and (ii) an adverse change in RGU mix in Ireland. In addition, the growth in ARPU was partially offset by (1) the impact of a January 1, 2015 change in how VAT is applied to certain components of our U.K. operations, which reduced revenue by \$49.9 million, and (2) a May 1, 2014 change in legislation in the U.K. with respect to the charging of VAT in connection with prompt payment discounts, as discussed below, which reduced revenue by \$24.0 million.
- (c) The decrease in mobile subscription revenue relates to the U.K. and is due to (i) lower ARPU, including the net impact of (a) a decline of \$41.6 million in postpaid mobile services revenue due to the November 2014 introduction of a Split-contract Program, (b) a decrease of \$11.2 million related to the above-described January 1, 2015 change in how VAT is applied and (c) an increase in revenue due to the favorable impact of a \$4.4 million nonrecurring adjustment to VAT recorded during the fourth quarter of 2015, and (ii) a decrease in the average number of subscribers, as a decrease in the average number of prepaid subscribers more than offset the increase in the average number of postpaid subscribers.
- (d) The increase in B2B revenue is primarily due to (i) an increase in data revenue, primarily attributable to (a) higher volumes and (b) an increase of \$22.7 million in the U.K.'s amortization of deferred upfront fees on B2B contracts, (ii) an increase in low-margin equipment sales in the U.K. and (iii) an increase in voice revenue, largely attributable to the net effect of (1) an \$18.2 million increase recorded in the U.K. during the fourth quarter of 2015 related to the settlement of disputes with mobile operators over amounts charged for voice traffic, including \$16.3 million related to years prior to 2015, and (2) a decline in usage.
- (e) The increase in other non-subscription revenue is primarily due to the net effect of (i) an increase in mobile handset sales, primarily attributable to a \$144.6 million increase associated with the November 2014 introduction of a Split-contract Program, (ii) a decrease in interconnect revenue of \$23.4 million, primarily due to a decline in mobile short message service (or SMS) termination volumes in the U.K., and (iii) a decrease in installation revenue of \$12.6 million. For additional information regarding Split-contract Programs, see note 3 to our consolidated financial statements.

(f) Represents the estimated impact of the non-cable subscribers in the U.K. that we sold in the fourth quarter of 2014 (the U.K. Non-Cable Disposal). These non-cable subscribers were migrated to a third-party during the first nine months of 2015.

On March 19, 2014, the U.K. government announced a change in legislation with respect to the charging of VAT in connection with prompt payment discounts such as those that Virgin Media offers to its fixed-line telephony customers. This change, which took effect on May 1, 2014, impacted Virgin Media and some of its competitors. For additional information regarding a challenge from the U.K. government regarding Virgin Media's application of the prompt payment discount rules prior to the May 1, 2014 change in legislation, see note 17 to our consolidated financial statements.

The Netherlands. The increase in the Netherlands' revenue during 2015, as compared to 2014, is primarily due to the Ziggo Acquisition. Due to the size of the Ziggo Acquisition and the resulting impact on the organic growth rate of the Netherlands, the below discussion and analysis of the Netherlands' revenue is presented on a pro forma basis as if the results of Ziggo were included along with those of Ziggo Services for 2014. The pro forma revenue amount for Ziggo is based on Ziggo's publicly-reported results for 2014, as adjusted to (i) convert Ziggo's publicly-reported results from International Financial Reporting Standards, as adopted by the EU, to GAAP, (ii) conform one of Ziggo's accounting policies to the corresponding Liberty Global accounting policy and (iii) reflect the impact of the acquisition accounting applied to the Ziggo Acquisition. We believe this pro forma revenue analysis provides the most meaningful comparison of the Netherlands' revenue.

On a pro forma basis, the Netherlands' revenue decreased \$618.1 million or 18.4% during 2015, as compared to 2014. This decrease includes (i) a pro forma organic decrease of \$82.7 million or 2.5% and (ii) the impact of FX, as set forth below:

	oscription evenue	Non- subscription revenue	Total
		in millions	
Pro forma decrease in cable subscription revenue due to change in:			
Average number of RGUs (a)	\$ (36.4)	\$	\$ (36.4)
ARPU (b)	(7.9)	_	(7.9)
Total pro forma decrease in cable subscription revenue	(44.3)		(44.3)
Pro forma increase in mobile subscription revenue (c)	18.7	_	18.7
Total pro forma decrease in subscription revenue	(25.6)		(25.6)
Pro forma decrease in B2B revenue.		(4.8)	(4.8)
Pro forma decrease in other non-subscription revenue (d)		(52.3)	(52.3)
Total pro forma organic decrease	(25.6)	(57.1)	(82.7)
Pro forma impact of FX	(491.8)	(43.6)	(535.4)
Total	\$ (517.4)	\$ (100.7)	\$ (618.1)

<sup>(</sup>a) The proforma decrease in cable subscription revenue related to a change in the average number of RGUs is attributable to a decline in the average numbers of basic video, enhanced video and fixed-line telephony RGUs that was only partially offset by an increase in the average number of broadband internet RGUs.

<sup>(</sup>b) The pro forma decrease in cable subscription revenue related to a change in ARPU is attributable to the net effect of (i) a net decrease due to (a) lower ARPU from video and fixed-line telephony services and (b) higher ARPU from broadband internet services and (ii) an improvement in RGU mix.

<sup>(</sup>c) The pro forma increase in mobile subscription revenue is primarily due to an increase in the average number of mobile subscribers.

<sup>(</sup>d) The pro forma decrease in other non-subscription revenue is primarily due to (i) a decrease in revenue of \$26.9 million resulting from the termination of a Ziggo parter network agreement shortly after the Ziggo Acquisition, (ii) a decrease in installation revenue and (iii) lower revenue from set-top box sales due to the fact that we stopped selling set-top boxes in the Netherlands during the first quarter of 2015.

*Germany.* The decrease in Germany's revenue during 2015, as compared to 2014, includes (i) an organic increase of \$159.4 million or 5.9% and (ii) the impact of FX, as set forth below:

	oscription venue (a)		Non- escription venue (b)	 Γotal
		in m	illions	
Increase in cable subscription revenue due to change in:				
Average number of RGUs (c)	\$ 82.5	\$	_	\$ 82.5
ARPU (d)	95.9		_	95.9
Total increase in cable subscription revenue.	178.4			178.4
Decrease in mobile subscription revenue	(0.8)			(0.8)
Total increase in subscription revenue	177.6			177.6
Increase in B2B revenue (e)	_		6.3	6.3
Decrease in other non-subscription revenue (f)			(24.5)	(24.5)
Total organic increase (decrease)	177.6		(18.2)	159.4
Impact of FX	(432.0)		(39.4)	(471.4)
Total	\$ (254.4)	\$	(57.6)	\$ (312.0)

- (a) Subscription revenue includes revenue from multi-year bulk agreements with landlords or housing associations or with third parties that operate and administer the in-building networks on behalf of housing associations. These bulk agreements, which generally allow for the procurement of the basic video signals at volume-based discounts, provide access to approximately two-thirds of Germany's video subscribers. Germany's bulk agreements are, to a significant extent, medium-and long-term contracts. As of December 31, 2015, bulk agreements covering approximately 33% of the video subscribers that Germany serves expire by the end of 2016 or are terminable on 30-days notice. During the three months ended December 31, 2015, Germany's 20 largest bulk agreement accounts generated approximately 7% of its total revenue (including estimated amounts billed directly to the building occupants for digital video, broadband internet and fixed-line telephony services). No assurance can be given that Germany's bulk agreements will be renewed or extended on financially equivalent terms or at all.
- (b) Other non-subscription revenue includes fees received for the carriage of certain channels included in Germany's basic and enhanced video offerings. This channel carriage fee revenue is subject to contracts that expire or are otherwise terminable by either party on various dates ranging from 2016 through 2018. The aggregate amount of revenue related to these channel carriage contracts represented approximately 4% of Germany's total revenue during the three months ended December 31, 2015. No assurance can be given that these contracts will be renewed or extended on financially equivalent terms, or at all. Also, our ability to increase the aggregate channel carriage fees that Germany receives for each channel is limited through 2016 by certain commitments we made to regulators in connection with the acquisition of KBW.
- (c) The increase in cable subscription revenue related to a change in the average number of RGUs is attributable to an increase in the average numbers of broadband internet, fixed-line telephony and enhanced video RGUs that was only partially offset by a decline in the average number of basic video RGUs.
- (d) The increase in cable subscription revenue related to a change in ARPU is attributable to (i) higher ARPU from broadband internet, video and fixed-line telephony services and (ii) an improvement in RGU mix.
- (e) The increase in B2B revenue is due to higher revenue from data and voice services.
- (f) The decrease in other non-subscription revenue is primarily due to (i) a decrease from the unfavorable impact of \$11.9 million of nonrecurring network usage revenue that Germany recorded during the first quarter of 2014 following the settlement of prior period amounts, (ii) a decrease in channel carriage fee revenue of \$4.9 million and (iii) a decrease in interconnect revenue of \$4.8 million.

*Belgium.* The decrease in Belgium's revenue during 2015, as compared to 2014, includes (i) an organic increase of \$138.7 million or 6.1% and (ii) the impact of FX, as set forth below:

	scription evenue	subse	Non- cription venue	Total
		in m	illions	
Increase in cable subscription revenue due to change in:				
Average number of RGUs (a)	\$ 38.1	\$		\$ 38.1
ARPU (b)	37.7			37.7
Total increase in cable subscription revenue	75.8			75.8
Increase in mobile subscription revenue (c)	29.6			29.6
Total increase in subscription revenue	105.4			105.4
Increase in B2B revenue (d)			16.7	16.7
Increase in other non-subscription revenue (e)			16.6	16.6
Total organic increase	105.4		33.3	138.7
Impact of FX	(333.6)		(63.5)	(397.1)
Total	\$ (228.2)	\$	(30.2)	\$ (258.4)

- (a) The increase in cable subscription revenue related to a change in the average number of RGUs is attributable to an increase in the average numbers of fixed-line telephony, broadband internet and enhanced video RGUs that was only partially offset by a decline in the average number of basic video RGUs.
- (b) The increase in cable subscription revenue related to a change in ARPU is attributable to (i) higher ARPU from broadband internet, video and fixed-line telephony services and (ii) an improvement in RGU mix.
- (c) The increase in mobile subscription revenue is due to the net effect of (i) an increase in the average number of mobile subscribers and (ii) lower ARPU.
- (d) The increase in B2B revenue is primarily due to higher revenue from (i) information technology security services and related equipment sales, (ii) broadband internet services and (iii) voice services.
- (e) The increase in other non-subscription revenue is primarily due to the net effect of (i) an increase in mobile handset sales of \$11.6 million, (ii) an increase in interconnect revenue of \$9.2 million, primarily attributable to the net effect of (a) growth in mobile call volumes and (b) lower SMS usage, and (iii) a decrease in set-top box sales of \$7.4 million, primarily due to a digital cable migration completed during the third quarter of 2014. The increase in Belgium's mobile handset sales, which typically generate relatively low margins, is primarily due to the net effect of (1) an increase of \$12.5 million associated with the June 2015 introduction of a Split-contract Program, (2) a decrease in subsidized handset sales and (3) higher revenue from contract termination fees applicable to subsidized handsets.

For information concerning certain regulatory developments that could have an adverse impact on our revenue in Belgium, see note 17 to our consolidated financial statements.

Switzerland/Austria. The decrease in Switzerland/Austria's revenue during 2015, as compared to 2014, includes (i) an organic increase of \$52.3 million or 2.8%, (ii) the impact of an acquisition and (iii) the impact of FX, as set forth below:

	ription enue	subs	Non- cription venue	Total
		in m	nillions	
Increase in cable subscription revenue due to change in:				
Average number of RGUs (a)	\$ 9.3	\$	_	\$ 9.3
ARPU (b)	18.4		_	18.4
Total increase in cable subscription revenue	 27.7			27.7
Increase in mobile subscription revenue (c)	8.8		_	8.8
Total increase in subscription revenue.	 36.5			36.5
Increase in B2B revenue (d)			6.4	6.4
Increase in other non-subscription revenue (e)			9.4	9.4
Total organic increase	36.5		15.8	52.3
Impact of an acquisition	5.7		(0.4)	5.3
Impact of FX	(117.9)		(27.6)	(145.5)
Total	\$ (75.7)	\$	(12.2)	\$ (87.9)

- (a) The increase in cable subscription revenue related to a change in the average number of RGUs is attributable to an increase in the average numbers of broadband internet, fixed-line telephony and enhanced video RGUs that was primarily offset by a decline in the average number of basic video RGUs.
- (b) The increase in cable subscription revenue related to a change in ARPU is due to an increase in ARPU in both Switzerland and Austria. The increase in ARPU in Switzerland is attributable to (i) an improvement in RGU mix and (ii) a net increase due to (a) higher ARPU from video services and (b) lower ARPU from fixed-line telephony and broadband internet services. The increase in ARPU in Austria is attributable to the net effect of (1) a net increase due to (I) higher ARPU from video and broadband internet services and (II) lower ARPU from fixed-line telephony services and (2) an adverse change in RGU mix.
- (c) The increase in mobile subscription revenue is primarily due to an increase in the average number of mobile subscribers in Switzerland. Switzerland's mobile services were launched during the second quarter of 2014.
- (d) The increase in B2B revenue is primarily due to a net increase in Switzerland from (i) higher revenue from voice and data services and (ii) lower revenue from construction services and equipment sales.
- (e) The increase in other non-subscription revenue is due to the net effect of (i) an increase in mobile handset sales, which typically generate relatively low margins, (ii) a decrease in revenue from Austria's non-cable subscriber base and (iii) a net increase resulting from individually insignificant changes in other non-subscription categories.

Central and Eastern Europe. The decrease in Central and Eastern Europe's revenue during 2015, as compared to 2014, includes (i) an organic increase of \$16.1 million or 1.3% and (ii) the impact of FX, as set forth below:

	bscription revenue	subs	Non- cription venue	Total
		in m	illions	
Increase (decrease) in cable subscription revenue due to change in:				
Average number of RGUs (a)	\$ 37.5	\$		\$ 37.5
ARPU (b)	(28.7)			(28.7)
Total increase in cable subscription revenue	8.8			8.8
Increase in mobile subscription revenue	2.0			2.0
Total increase in subscription revenue.	10.8			10.8
Increase in B2B revenue			4.2	4.2
Increase in other non-subscription revenue			1.1	1.1
Total organic increase.	10.8		5.3	16.1
Impact of FX	(191.1)		(17.9)	(209.0)
Total	\$ (180.3)	\$	(12.6)	\$ (192.9)

<sup>(</sup>a) The increase in cable subscription revenue related to a change in the average number of RGUs is attributable to the net effect of (i) an increase in the average numbers of enhanced video, broadband internet and fixed-line telephony RGUs in Romania, Poland, Hungary and Slovakia, (ii) a decline in the average number of basic video RGUs in Poland, Hungary, Romania and Slovakia, (iii) an increase in the average number of DTH RGUs, (iv) a decline in the average numbers of fixed-line telephony and enhanced video RGUs in the Czech Republic and (v) an increase in the average numbers of basic video and broadband internet RGUs in the Czech Republic.

<sup>(</sup>b) The decrease in cable subscription revenue related to a change in ARPU is attributable to the net effect of (i) a net decrease due to (a) lower ARPU from fixed-line telephony services, (b) lower ARPU from broadband internet services, primarily in Poland, and (c) higher ARPU from video services, primarily in Poland and Romania, and (ii) an improvement in RGU mix. In addition, the decline in ARPU includes the impact of a January 1, 2015 change in how VAT is calculated for UPC DTH's operations in Hungary, the Czech Republic and Slovakia, which reduced UPC DTH's revenue by \$16.4 million.

*Chile.* The decrease in Chile's revenue during 2015, as compared to 2014, includes (i) an organic increase of \$61.5 million or 6.9% and (ii) the impact of FX, as set forth below:

	oscription evenue	subsc	on- cription cenue	Total
		in m	illions	
Increase in cable subscription revenue due to change in:				
Average number of RGUs (a)	\$ 23.0	\$		\$ 23.0
ARPU (b)	20.4			20.4
Total increase in cable subscription revenue	43.4			43.4
Increase in mobile subscription revenue (c)	 16.3			16.3
Total increase in subscription revenue	59.7			59.7
Increase in non-subscription revenue (d)	 		1.8	1.8
Total organic increase	59.7		1.8	61.5
Impact of FX	 (114.4)		(7.5)	(121.9)
Total	\$ (54.7)	\$	(5.7)	\$ (60.4)

- (a) The increase in cable subscription revenue related to a change in the average number of RGUs is attributable to an increase in the average numbers of broadband internet and enhanced video RGUs that was only partially offset by a decline in the average numbers of basic video and fixed-line telephony RGUs.
- (b) The increase in cable subscription revenue related to a change in ARPU is attributable to (i) a net increase due to (a) higher ARPU from video and broadband internet services and (b) lower ARPU from fixed-line telephony services and (ii) an improvement in RGU mix. In addition, the growth in ARPU was partially offset by a decrease in revenue due to the impact of a \$2.5 million adjustment recorded during the first quarter of 2015 to reflect the retroactive application of a proposed tariff on ancillary services provided directly to customers for the period from July 2013 through February 2014.
- (c) The increase in mobile subscription revenue is due to (i) an increase in the average number of subscribers, as an increase in the average number of postpaid subscribers more than offset the decrease in the average number of prepaid subscribers, and (ii) higher ARPU primarily due to a higher proportion of mobile subscribers on postpaid plans, which generate higher ARPU than prepaid plans.
- (d) The increase in non-subscription revenue is due to the net effect of (i) a decrease in interconnect revenue, (ii) an increase in installation revenue, (iii) an increase in advertising revenue and (iv) a net increase resulting from individually insignificant changes in other non-subscription categories. The decrease in interconnect revenue is primarily due to (a) lower rates and (b) a decrease of \$3.0 million related to the impact of adjustments recorded during the first and third quarters of 2015 to reflect the retroactive application of a tariff reduction to June 2012.

*Puerto Rico*. The increase in Puerto Rico's revenue during 2015, as compared to 2014, includes (i) an organic increase of \$20.5 million or 6.7% and (ii) the impact of the Choice Acquisition, as set forth below:

	oscription evenue	subs	Non- scription evenue nillions	<u>Total</u>		
Increase (decrease) in cable subscription revenue due to change in:						
Average number of RGUs (a)	\$ 20.8	\$		\$	20.8	
ARPU (b)	(5.7)				(5.7)	
Total increase in cable subscription revenue	15.1				15.1	
Increase in B2B revenue	_		4.2		4.2	
Increase in other non-subscription revenue	_		1.2		1.2	
Total organic increase	15.1		5.4		20.5	
Impact of the Choice Acquisition	47.2		5.4		52.6	
Total	\$ 62.3	\$	10.8	\$	73.1	

<sup>(</sup>a) The increase in cable subscription revenue related to a change in the average number of RGUs is attributable to an increase in the average numbers of fixed-line telephony, broadband internet and enhanced video RGUs.

<sup>(</sup>b) The decrease in cable subscription revenue related to a change in ARPU is primarily due to an adverse change in RGU mix. Excluding the impact of RGU mix, ARPU was relatively unchanged due to the net effect of (i) lower ARPU from fixed-line telephony services and (ii) higher ARPU from video and broadband internet services.

	Y	ear ended I	Dece	ember 31,	Increase (d	lecrease)	Organic increase (decrease) (a)
		2014		2013	\$	%	%
			ir	millions			
Liberty Global Group:							
European Operations Division:							
U.K./Ireland (b)	\$	7,409.9	\$	4,117.4	\$ 3,292.5	80.0	4.5
The Netherlands (c)		1,498.5		1,242.4	256.1	20.6	(1.3)
Germany		2,711.5		2,559.2	152.3	6.0	6.0
Belgium		2,279.4		2,185.9	93.5	4.3	4.3
Switzerland/Austria		1,846.1		1,767.1	79.0	4.5	3.1
Total Western Europe		15,745.4		11,872.0	3,873.4	32.6	4.0
Central and Eastern Europe		1,259.5		1,272.0	(12.5)	(1.0)	0.7
Central and other		(7.1)		(0.4)	(6.7)	N.M.	N.M.
Total European Operations Division		16,997.8	_	13,143.6	3,854.2	29.3	3.6
Corporate and other		70.8		77.1	(6.3)	(8.2)	(10.1)
Intersegment eliminations		(24.9)		(34.0)	9.1	N.M.	N.M.
Total Liberty Global Group		17,043.7		13,186.7	3,857.0	29.2	3.6
LiLAC Group:							
Chile		898.5		991.6	(93.1)	(9.4)	4.4
Puerto Rico		306.1		297.2	8.9	_	3.0
Total LiLAC Group		1,204.6		1,288.8	(84.2)	(6.5)	4.1
Inter-group eliminations				(1.3)	1.3	N.M.	N.M.
Total	\$	18,248.3	\$	14,474.2	\$ 3,774.1	26.1	3.6
			=				

<sup>(</sup>a) As further described under *Results of Operations* above, our organic revenue growth rate during 2014 is impacted by the organic growth of Virgin Media. Excluding the impact of Virgin Media, the organic increase in (i) U.K./Ireland's revenue would have been 1.1%, (ii) Liberty Global Group's revenue would have been 3.1% and (iii) our total revenue would have been 3.2%. For additional information, see *Discussion and Analysis of our Consolidated Results — Revenue*.

N.M. — Not Meaningful.

<sup>(</sup>b) The amount presented for 2013 includes the post-acquisition revenue of Virgin Media from June 8, 2013 through December 31, 2013.

<sup>(</sup>c) The amount presented for 2014 includes the post-acquisition revenue of Ziggo from November 12, 2014 through December 31, 2014.

U.K./Ireland. The details of U.K./Ireland's revenue during 2014, as compared to 2013, are set forth below:

	 Year ended	Dece	mber 31,		Incr	Organic increase	
	2014		2013	\$		%	%
		in	millions				
U.K.	\$ 6,941.1	\$	3,653.7	\$	3,287.4	90.0	4.9
Ireland	468.8		463.7		5.1	1.1	1.1
Total	\$ 7,409.9	\$	4,117.4	\$	3,292.5	80.0	4.5

The increase in U.K./Ireland's revenue during 2014, as compared to 2013, is primarily due to the June 2013 Virgin Media Acquisition. The organic revenue growth rate of U.K./Ireland is impacted by the size and timing of the Virgin Media Acquisition. Accordingly, (i) we present a separate discussion and analysis for each of the U.K. and Ireland and (ii) the below discussion and analysis of the U.K.'s revenue is presented on a pro forma basis as if the results of Virgin Media were included for the full year 2013. We believe this pro forma analysis provides a more meaningful comparison of Virgin Media's revenue.

*U.K.* During 2014, Virgin Media generated revenue of \$6,941.1 million, representing a pro forma organic increase of \$163.4 million or 2.5%, compared to the revenue reported by Virgin Media during 2013. This pro forma organic increase in Virgin Media's revenue, which represents the increase that remains after eliminating the impacts of (i) a decrease of \$21.4 million associated with the assumed alignment of Virgin Media's policy to our policy for accounting for installation and certain nonrecurring fees received on B2B contracts, (ii) an acquisition and (iii) FX, is attributable to the net effect of (a) an increase in cable subscription revenue of \$141.6 million or 3.2%, (b) a decrease in other non-subscription revenue of \$83.5 million or 20.2%, (c) an increase in mobile subscription revenue of \$61.9 million or 9.0% and (d) an increase in non-subscription B2B revenue of \$43.4 million or 4.8%.

The pro forma organic increase during 2014 in Virgin Media's cable subscription revenue is primarily due to an increase in ARPU and, to a lesser extent, the average number of RGUs, as an increase in the average number of broadband internet RGUs was only partially offset by a decline in the average numbers of enhanced video and fixed-line telephony RGUs. The increase in ARPU is primarily due to the net effect of (i) higher ARPU from broadband internet services and (ii) lower ARPU from fixed-line telephony and digital video services. In addition, the growth in fixed-line telephony ARPU was partially offset by the impact of a change in legislation with respect to the charging of VAT in connection with prompt payment discounts, as discussed below.

The pro forma organic increase in Virgin Media's mobile subscription revenue is due to (i) higher ARPU and (ii) an increase in the average number of subscribers, as an increase in the average number of postpaid subscribers more than offset the decrease in the average number of prepaid subscribers. In addition, the growth in mobile subscription revenue was partially offset by the impact of certain nonrecurring net adjustments of \$6.0 million and \$1.8 million during the first and second quarters of 2013, respectively, that positively impacted 2013.

The pro forma organic increase in Virgin Media's non-subscription B2B revenue is primarily due to the net effect of (i) an increase in B2B data revenue primarily attributable to (a) increased volumes and (b) an increase of \$17.8 million in the amortization of deferred upfront fees on B2B contracts and (ii) a decline in B2B voice revenue primarily attributable to (1) lower termination rates and (2) a decline in usage. In addition, the growth in B2B revenue also benefited from the impact of certain nonrecurring net adjustments of \$4.8 million that negatively impacted the third quarter of 2013.

The pro forma organic decrease in Virgin Media's other non-subscription revenue is primarily attributable to the net effect of (i) a decrease in interconnect revenue, primarily due to a reduction in (a) fixed-line termination rates in February 2014 and (b) mobile termination rates in April 2013, (ii) a decrease of \$28.9 million related to a decline in Virgin Media's non-cable subscriber base, (iii) a decrease in installation revenue and (iv) an increase in mobile handset sales primarily attributable to the net effect of (1) an \$11.3 million increase related to the November 2014 introduction of a Split-contract Program and (2) a decrease in sales to third-party retailers and prepaid handset sales.

On March 19, 2014, the U.K. government announced a change in legislation with respect to the charging of VAT in connection with prompt payment discounts such as those that Virgin Media offers to its fixed-line telephony customers. The changes, which took effect on May 1, 2014, impacted Virgin Media and some of its competitors. As a result of this legislation, Virgin Media's revenue was £28.9 million (\$42.6 million) lower during 2014, as compared to 2013.

*Ireland.* The increase in Ireland's revenue during 2014, as compared to 2013, includes (i) an organic increase of \$5.0 million or 1.1%, and (ii) the impact of FX, as set forth below:

	oscription evenue	subs	Non- scription evenue	 Total
Increase (decrease) in cable subscription revenue due to change in:		ın n	nillions	
Average number of RGUs (a)	\$ 26.4	\$		\$ 26.4
ARPU (b)	(14.2)			(14.2)
Total increase in cable subscription revenue	12.2		_	12.2
Decrease in B2B revenue	_		(2.3)	(2.3)
Decrease in other non-subscription revenue (c)	_		(4.9)	(4.9)
Total organic increase (decrease)	12.2		(7.2)	5.0
Impact of FX	0.3		(0.2)	0.1
Total	\$ 12.5	\$	(7.4)	\$ 5.1

<sup>(</sup>a) The increase in cable subscription revenue related to a change in the average number of RGUs is attributable to an increase in the average numbers of fixed-line telephony and broadband internet RGUs that was only partially offset by a decline in the average numbers of basic video, MMDS and enhanced video RGUs.

(c) The decrease in other non-subscription revenue is primarily due to a decrease in installation revenue.

*The Netherlands*. The increase in the Netherlands' revenue during 2014, as compared to 2013, includes (i) an organic decrease of \$16.3 million or 1.3%, (ii) the impact of the Ziggo Acquisition and (iii) the impact of FX, as set forth below:

	oscription revenue	1			Total
		in	millions		
Increase (decrease) in cable subscription revenue due to change in:					
Average number of RGUs (a)	\$ 1.5	\$		\$	1.5
ARPU (b)	(3.4)		_		(3.4)
Total decrease in cable subscription revenue	(1.9)				(1.9)
Decrease in mobile subscription revenue	(0.2)		_		(0.2)
Total decrease in subscription revenue	(2.1)				(2.1)
Decrease in B2B revenue			(2.8)		(2.8)
Decrease in other non-subscription revenue (c)			(11.4)		(11.4)
Total organic decrease	(2.1)		(14.2)		(16.3)
Impact of the Ziggo Acquisition	262.2		30.0		292.2
Impact of FX	(21.0)		1.2		(19.8)
Total	\$ 239.1	\$	17.0	\$	256.1

<sup>(</sup>a) The increase in cable subscription revenue related to a change in the average number of RGUs is attributable to an increase in the average numbers of broadband internet, fixed-line telephony and enhanced video RGUs that was mostly offset by a decline in the average number of basic video RGUs.

<sup>(</sup>b) The decrease in cable subscription revenue related to a change in ARPU is attributable to (i) an adverse change in RGU mix and (ii) a net decrease primarily due to (a) lower ARPU from fixed-line telephony services and (b) higher ARPU from video services.

- (b) The decrease in cable subscription revenue related to a change in ARPU is attributable to the net effect of (i) a net decrease due to (a) lower ARPU from broadband internet services and (b) higher ARPU from video and fixed-line telephony services and (ii) an improvement in RGU mix.
- (c) The decrease in other non-subscription revenue is primarily due to lower installation revenue.

*Germany.* The increase in Germany's revenue during 2014, as compared to 2013, includes (i) an organic increase of \$153.7 million or 6.0% and (ii) the impact of FX, as set forth below:

	scription evenue	subsc	on- cription cenue	Total
		in m	illions	
Increase in cable subscription revenue due to change in:				
Average number of RGUs (a)	\$ 105.7	\$	_	\$ 105.7
ARPU (b)	36.4		_	36.4
Total increase in cable subscription revenue	142.1			142.1
Increase in mobile subscription revenue (c)	5.3			5.3
Total increase in subscription revenue	147.4			147.4
Increase in B2B revenue			0.5	0.5
Increase in other non-subscription revenue (d)			5.8	5.8
Total organic increase	147.4		6.3	153.7
Impact of FX	(1.6)		0.2	(1.4)
Total	\$ 145.8	\$	6.5	\$ 152.3

- (a) The increase in cable subscription revenue related to a change in the average number of RGUs is attributable to an increase in the average numbers of broadband internet, fixed-line telephony and enhanced video RGUs that was only partially offset by a decline in the average number of basic video RGUs.
- (b) The increase in cable subscription revenue related to a change in ARPU is attributable to (i) a net increase due to (a) higher ARPU from broadband internet services, (b) lower ARPU from fixed-line telephony services and (c) higher ARPU from video services and (ii) an improvement in RGU mix.
- (c) The increase in mobile subscription revenue is due to the net effect of (i) an increase in the average number of mobile subscribers and (ii) lower ARPU.
- (d) The increase in other non-subscription revenue is attributable to the net effect of (i) a decrease in interconnect revenue of \$15.6 million, primarily attributable to lower fixed-line termination rates, (ii) an increase in channel carriage fee revenue of \$7.0 million and (iii) a net increase from individually insignificant changes in other non-subscription revenue categories. The increase during 2014, as compared to 2013, also includes an \$11.4 million increase in network usage revenue related to the first quarter 2014 settlement of prior year amounts.

*Belgium.* The increase in Belgium's revenue during 2014, as compared to 2013, includes (i) an organic increase of \$94.5 million or 4.3% and (ii) the impact of FX, as set forth below:

	bscription revenue	subs	Non- cription venue	Total
		in m	nillions	
Increase in cable subscription revenue due to change in:				
Average number of RGUs (a)	\$ 53.1	\$		\$ 53.1
ARPU (b)	16.4			16.4
Total increase in cable subscription revenue	69.5			69.5
Increase in mobile subscription revenue (c)	12.9			12.9
Total increase in subscription revenue	82.4			82.4
Increase in B2B revenue (d)	_		9.4	9.4
Increase in other non-subscription revenue (e)			2.7	2.7
Total organic increase	82.4		12.1	94.5
Impact of FX	(0.7)		(0.3)	(1.0)
Total	\$ 81.7	\$	11.8	\$ 93.5

- (a) The increase in cable subscription revenue related to a change in the average number of RGUs is attributable to an increase in the average numbers of fixed-line telephony, enhanced video and broadband internet RGUs that was only partially offset by a decline in the average number of basic video RGUs.
- (b) The increase in cable subscription revenue related to a change in ARPU is primarily attributable to an improvement in RGU mix. Excluding RGU mix, ARPU remained relatively constant primarily due to the net effect of (i) higher ARPU from broadband internet services and (ii) lower ARPU from fixed-line telephony services.
- (c) The increase in mobile subscription revenue is due to the net effect of (i) an increase in the average number of mobile subscribers and (ii) lower ARPU.
- (d) The increase in B2B revenue is primarily due to (i) higher revenue from voice, video and data services and (ii) higher wholesale revenue from mobile services.
- (e) The increase in other non-subscription revenue is primarily due to the net effect of (i) an increase in interconnect revenue of \$12.2 million, primarily due to the net effect of (a) growth in mobile customers and (b) lower SMS usage, (ii) a decrease in mobile handset sales of \$11.7 million and (iii) an increase in set-top box sales of \$6.8 million, primarily due to a digital cable migration completed during the third quarter of 2014. The decrease in Belgium's mobile handset sales, which typically generate relatively low margins, is primarily due to a decrease in sales to third-party retailers.

*Switzerland/Austria.* The increase in Switzerland/Austria's revenue during 2014, as compared to 2013, includes (i) an organic increase of \$55.5 million or 3.1%, (ii) the impact of acquisitions and (iii) the impact of FX, as set forth below:

	bscription revenue	Non- subscription revenue		Total
		in n	nillions	
Increase in cable subscription revenue due to change in:				
Average number of RGUs (a)	\$ 36.4	\$	_	\$ 36.4
ARPU (b)	19.1		_	19.1
Total increase in cable subscription revenue	55.5			55.5
Increase in B2B revenue (c)			6.7	6.7
Decrease in other non-subscription revenue (d)			(6.7)	(6.7)
Total organic increase	55.5			55.5
Impact of acquisitions	7.3		(1.7)	5.6
Impact of FX	 16.8		1.1	17.9
Total	\$ 79.6	\$	(0.6)	\$ 79.0

- (a) The increase in cable subscription revenue related to a change in the average number of RGUs is attributable to an increase in the average numbers of broadband internet, enhanced video and fixed-line telephony RGUs that was largely offset by a decline in the average number of basic video RGUs.
- (b) The increase in cable subscription revenue related to a change in ARPU is due to an increase in Switzerland that was only partially offset by a decrease in Austria. The increase in Switzerland is attributable to (i) an improvement in RGU mix and (ii) a net increase due to (a) higher ARPU from video services, (b) lower ARPU from fixed-line telephony services and (c) higher ARPU from broadband internet services. The decrease in Austria is attributable to (1) a net decrease due to (I) lower ARPU from fixed-line telephony and broadband internet services and (II) higher ARPU from video services and (2) an adverse change in RGU mix.
- (c) The increase in B2B revenue is primarily due to the net effect of (i) increased volumes in voice, data and broadband internet services in Switzerland and (ii) lower revenue from internet and voice services in Austria.
- (d) The decrease in other non-subscription revenue is largely due to the net effect of (i) a decrease in installation revenue in each of Switzerland and Austria, (ii) a decrease in revenue from Austria's non-cable subscriber base and (iii) an increase in mobile handset sales, which typically generate relatively low margins, in Switzerland.

Central and Eastern Europe. The decrease in Central and Eastern Europe's revenue during 2014, as compared to 2013, includes (i) an organic increase of \$9.2 million or 0.7% and (ii) the impact of FX, as set forth below:

	bscription revenue		Non- oscription revenue	Total
		in 1	millions	
Increase (decrease) in cable subscription revenue due to change in:				
Average number of RGUs (a)	\$ 30.8	\$	_	\$ 30.8
ARPU (b)	 (16.9)			(16.9)
Total increase in cable subscription revenue	13.9			13.9
Increase in B2B revenue (c)			5.1	5.1
Decrease in other non-subscription revenue (d)			(9.8)	(9.8)
Total organic increase (decrease)	13.9		(4.7)	9.2
Impact of FX	(20.0)		(1.7)	(21.7)
Total	\$ (6.1)	\$	(6.4)	\$ (12.5)

- (a) The increase in cable subscription revenue related to a change in the average number of RGUs is primarily attributable to (i) an increase in the average numbers of enhanced video, broadband internet and fixed-line telephony RGUs in Poland, Romania, Hungary and Slovakia and (ii) an increase in the average number of DTH RGUs that was largely offset by (a) a decline in the average number of basic video RGUs in Poland, Romania, Hungary and Slovakia and (b) a decline in the average numbers of enhanced video and fixed-line telephony RGUs in the Czech Republic.
- (b) The decrease in cable subscription revenue related to a change in ARPU is primarily attributable to the net effect of (i) lower ARPU from fixed-line telephony, (ii) broadband internet services, primarily in Poland, and (iii) an improvement in RGU mix.
- (c) The increase in B2B revenue is largely due to higher revenue from voice services in Hungary and Poland.
- (d) The decrease in other non-subscription revenue is due to (i) a decrease in interconnect revenue, largely as a result of lower fixed-line telephony termination rates in Poland, and (ii) a net decrease resulting from individually insignificant changes in other non-subscription revenue categories.

*Chile.* The decrease in Chile's revenue during 2014, as compared to 2013, includes (i) an organic increase of \$43.4 million or 4.4% and (ii) the impact of FX, as set forth below:

	oscription evenue	sub	Non- scription evenue	Total
		in 1	millions	
Increase in cable subscription revenue due to change in:				
Average number of RGUs (a)	\$ 36.9	\$		\$ 36.9
ARPU (b)	13.5			13.5
Total increase in cable subscription revenue	50.4			50.4
Increase in mobile subscription revenue (c)	7.7			7.7
Total increase in subscription revenue.	58.1			58.1
Decrease in non-subscription revenue (d)			(14.7)	(14.7)
Total organic increase (decrease)	58.1		(14.7)	43.4
Impact of FX	(128.4)		(8.1)	(136.5)
Total	\$ (70.3)	\$	(22.8)	\$ (93.1)

- (a) The increase in cable subscription revenue related to a change in the average number of RGUs is attributable to an increase in the average numbers of enhanced video, broadband internet and fixed-line telephony RGUs that was only partially offset by a decline in the average number of basic video RGUs.
- (b) The increase in cable subscription revenue related to a change in ARPU is attributable to (i) a net increase due to (a) higher ARPU from broadband internet services, (b) lower ARPU from fixed-line telephony services and (c) higher ARPU from video services and (ii) an improvement in RGU mix.
- (c) The increase in mobile subscription revenue is due to (i) an increase in the average number of subscribers, as an increase in the average number of postpaid subscribers more than offset the decrease in the average number of prepaid subscribers, and (ii) higher ARPU primarily due to a higher proportion of mobile subscribers on postpaid plans, which generate higher ARPU than prepaid plans.
- (d) The decrease in non-subscription revenue is primarily due to a decrease in (i) interconnect revenue, primarily associated with a January 2014 decline in mobile terminations rates, and (ii) prepaid mobile handset sales, which typically generate relatively low margins.

Puerto Rico. The increase in Puerto Rico's revenue during 2014, as compared to 2013, is set forth below:

	Subscription revenue		Non- subscription revenue		Total	
			in millions			
Increase (decrease) in cable subscription revenue due to change in:						
Average number of RGUs (a)	\$	28.5	\$	_	\$	28.5
ARPU (b)		(20.5)				(20.5)
Total increase in cable subscription revenue		8.0				8.0
Increase in B2B revenue				1.4		1.4
Decrease in other non-subscription revenue				(0.5)		(0.5)
Total	\$	8.0	\$	0.9	\$	8.9

<sup>(</sup>a) The increase in cable subscription revenue related to a change in the average number of RGUs is attributable to an increase in the average numbers of fixed-line telephony, broadband internet and enhanced video RGUs.

<sup>(</sup>b) The decrease in cable subscription revenue related to a change in ARPU is primarily attributable to (i) lower ARPU from fixed-line telephony and digital video services and (ii) an adverse change in RGU mix.

# Operating Expenses of our Reportable Segments

Operating expenses — 2015 compared to 2014

	Year ended	Dece	mber 31,		Increase (de	increase (decrease)		
•	2015		2014	\$ %		%		
		in	millions				_	
Liberty Global Group:								
European Operations Division:								
U.K./Ireland	\$ 3,019.3	\$	3,224.8	\$	(205.5)	(6.4)	2.7	
The Netherlands (a) (b)	844.7		444.9		399.8	89.9	(4.5)	
Germany	551.0		623.8		(72.8)	(11.7)	5.7	
Belgium	785.4		890.1		(104.7)	(11.8)	5.3	
Switzerland/Austria	483.2		528.5		(45.3)	(8.6)	(0.7)	
Total Western Europe	5,683.6		5,712.1		(28.5)	(0.5)	2.5	
Central and Eastern Europe	429.7		500.0		(70.3)	(14.1)	2.7	
Central and other	84.1		65.3		18.8	28.8	51.9	
Total European Operations Division	6,197.4		6,277.4		(80.0)	(1.3)	3.1	
Corporate and other	52.1		61.6		(9.5)	(15.4)	23.2	
Intersegment eliminations	(23.9)		(28.6)		4.7	N.M.	N.M.	
Total Liberty Global Group	6,225.6		6,310.4		(84.8)	(1.3)	3.3	
LiLAC Group:								
Chile	369.4		392.6		(23.2)	(5.9)	7.8	
Puerto Rico (b) (c)	165.6		135.3		30.3	22.4	5.1	
Total LiLAC Group	535.0		527.9		7.1	1.3	7.1	
Total operating expenses excluding share-based compensation expense	6,760.6		6,838.3		(77.7)	(1.1)	3.6	
Share-based compensation expense	3.4		7.6		(4.2)	(55.3)		
Total	\$ 6,764.0	\$	6,845.9	\$	(81.9)	(1.2)		

Organic

## N.M. — Not Meaningful.

General. Operating expenses include programming and copyright, network operations, mobile access and interconnect, customer operations, customer care, share-based compensation and other costs related to our operations. We do not include share-based compensation in the following discussion and analysis of the operating expenses of our reportable segments as share-based compensation expense is not included in the performance measures of our reportable segments. Share-based compensation expense is discussed under Discussion and Analysis of Our Consolidated Operating Results below. Programming and copyright costs, which represent a significant portion of our operating costs, are expected to rise in future periods as a result of (i) higher costs associated with the expansion of our digital video content, including rights associated with ancillary product offerings and rights that provide for the broadcast of live sporting events, (ii) rate increases and (iii) growth in the number of our enhanced video

<sup>(</sup>a) The amount presented for 2014 includes the post-acquisition operating expenses of Ziggo from November 12, 2014 through December 31, 2014.

<sup>(</sup>b) As further described under *Results of Operations* above, our organic growth rates are impacted by the methodology we use to estimate the impact of an acquisition. This impact is more pronounced in the Netherlands, where the acquired company (Ziggo) is significantly larger than our legacy operations in the Netherlands.

<sup>(</sup>c) The amount presented for 2015 includes the post-acquisition operating expenses of Choice, which was acquired on June 3, 2015.

subscribers. In addition, we are subject to inflationary pressures with respect to our labor and other costs and foreign currency exchange risk with respect to costs and expenses that are denominated in currencies other than the respective functional currencies of our operating segments (non-functional currency expenses). Any cost increases that we are not able to pass on to our subscribers through rate increases would result in increased pressure on our operating margins. For additional information concerning our foreign currency exchange risks see *Quantitative and Qualitative Disclosures about Market Risk*— *Foreign Currency Risk* below.

European Operations Division. The European Operations Division's operating expenses (exclusive of share-based compensation expense) decreased \$80.0 million or 1.3% during 2015, as compared to 2014. This decrease includes (i) an increase of \$578.5 million attributable to the impact of the Ziggo Acquisition and other less significant acquisitions and (ii) a decrease of \$41.7 million attributable to the U.K. Non-Cable Disposal. Excluding the effects of acquisitions, the U.K. Non-Cable Disposal and FX, the European Operations Division's operating expenses increased \$193.3 million or 3.1%. This increase includes the following factors:

- An increase in programming and copyright costs of \$195.7 million or 10.0%, primarily due to increases in U.K./Ireland and, to a lesser extent, Belgium. The increased costs in (i) U.K./Ireland are primarily due to higher costs for certain premium and basic content, due in part to a new sports programming contract entered into in August 2015, and (ii) Belgium are primarily due to (a) higher costs for certain premium content and (b) growth in the number of enhanced video subscribers. The increase in programming and copyright costs also includes a \$29.4 million net increase resulting from the impact of certain nonrecurring adjustments related to the settlement or reassessment of operational contingencies. The nonrecurring adjustments recorded during 2015 resulted in lower costs of \$10.4 million, including a \$6.5 million benefit in the Netherlands that we recorded during the third and fourth quarters of 2015 and a \$3.9 million benefit in Germany that we recorded during the fourth quarter of 2015. The nonrecurring adjustments recorded during 2014 resulted in lower costs of \$39.8 million, including (1) a \$17.5 million benefit in Belgium and a \$7.3 million benefit in Poland that we recorded during the first quarter of 2014 and (2) an \$11.6 million benefit in U.K./Ireland that we recorded during the second quarter of 2014;
- An increase in mobile handset costs of \$42.1 million, largely due to the net impact of (i) an increase in the proportion of higher-value handsets sold in U.K./Ireland and, to a lesser extent, increased mobile handset costs in Belgium, due in part to the impact of a Split-contract Program implemented in the U.K. in November 2014 and in Belgium in June 2015, (ii) a decrease in costs as a result of continued growth of subscriber identification module or "SIM"-only contracts in U.K./ Ireland and (iii) a decrease in costs associated with the impact of subscriber promotions involving free or heavily-discounted handsets that were offered in Belgium during 2014;
- An increase in outsourced labor and professional fees of \$40.6 million or 11.8%, primarily due to (i) higher call center costs in the Netherlands and U.K./Ireland and (ii) higher consulting costs in Belgium, Germany, the Netherlands and the European Operations Division's central operations. The higher call center costs in the Netherlands represent third-party costs that are primarily related to network and product harmonization activities following the Ziggo Acquisition that, together with certain other third-party customer care costs, accounted for an increase of \$17.3 million;
- A decrease in personnel costs of \$40.1 million or 4.4%, due primarily to the net effect of (i) lower incentive compensation costs, predominately in U.K./Ireland, (ii) decreased costs in U.K./Ireland due to higher capitalized labor costs associated with the U.K. Network Extension, (iii) annual wage increases, largely in U.K./Ireland, and (iv) lower costs related to certain employee benefits in the Netherlands;
- A decrease in mobile access and interconnect costs of \$18.2 million or 1.8%, primarily due to the net effect of (i) increased costs, primarily in U.K./Ireland and Belgium, attributable to higher mobile usage and, in the case of Belgium, mobile subscriber growth, (ii) a decline resulting from lower rates, primarily in U.K./Ireland and Germany, (iii) lower fixed-line telephony call volumes, primarily related to the net impact of declines in U.K./Ireland and the Netherlands and increases in Switzerland/Austria, (iv) an increase of \$4.4 million in U.K./Ireland related to the settlement of disputes with mobile operators over amounts charged for voice traffic during the fourth quarter of 2015 and (v) a decrease of \$4.2 million in Switzerland/Austria related to the settlement of an operational contingency during the third quarter of 2015;
- An increase in information technology-related expenses of \$17.8 million or 25.3%, primarily due to higher software and other information technology-related service and maintenance costs, primarily in U.K./Ireland; and
- A decrease in network-related expenses of \$11.1 million or 1.4%. This decrease includes (i) lower outsourced labor costs associated with customer-facing activities in U.K./Ireland, (ii) lower costs of \$8.6 million in U.K./Ireland associated with the reassessment of accruals or operational contingencies in 2015, (iii) an increase in third-party costs incurred in the Netherlands of \$2.8 million related to the harmonization of the Ziggo and Ziggo Services networks following the Ziggo

Acquisition and (iv) a decrease in network maintenance costs, as decreases in U.K./Ireland and Switzerland/Austria were largely offset by increases in the Netherlands, Germany and Belgium. The decrease in network expense also includes the impact of reductions in local authority charges for certain elements of network infrastructure in the U.K. arising from successful appeals during the last half of 2014 and the first half of 2015. As compared to 2014, these reductions in local authority charges resulted in an increase in U.K./Ireland's network-related expenses of \$8.6 million. Taking into account the impact of the recurring and nonrecurring benefits from lower local authority network infrastructure charges that are included in U.K./Ireland's 2015 network-related expenses and holding the assessed local authority network infrastructure rates and all other factors constant, we estimate that our total local authority network infrastructure charges in the U.K. for the year ending December 31, 2016 will be approximately \$18 million higher than the amount we incurred in 2015. No assurance can be given that actual results will not differ from our expectations in this regard.

*LiLAC Group.* The LiLAC Group's operating expenses (exclusive of share-based compensation expense) increased \$7.1 million or 1.3% during 2015, as compared to 2014. This increase includes an increase of \$23.4 million attributable to the impact of the Choice Acquisition. Excluding the effects of this acquisition and FX, the LiLAC Group's operating expenses increased \$37.4 million or 7.1%. This increase includes the following factors:

- An increase in programming and copyright costs of \$24.9 million or 10.7%, primarily associated with (i) increases in Chile and, to a lesser extent, Puerto Rico, due to growth in the numbers of enhanced video subscribers and, in the case of Puerto Rico, increased costs for certain content, and (ii) an increase of \$5.6 million arising from foreign currency exchange rate fluctuations with respect to Chile's U.S. dollar denominated programming contracts. During 2015, \$60.4 million or 44.7% of Chile's programming costs were denominated in U.S. dollars;
- A decrease in personnel costs of \$8.5 million or 13.8%, largely due to (i) lower incentive compensation costs in Chile
  and (ii) decreased costs related to higher proportions of employees devoted to the development of new billing and customer
  care systems and other capitalizable activities in Chile;
- An increase in mobile access and interconnect costs of \$6.1 million or 8.1%, primarily attributable to the net effect of (i) an increase in Chile related to (a) higher roaming costs due to the impact of increased volumes and (b) higher interconnect costs resulting from the net effect of increased call volumes and lower rates, (ii) a decrease of \$5.1 million in mobile access charges in Chile due to a February 2015 tariff decline that was retroactive to May 2014, including a decrease of \$2.5 million related to 2014 access charges, and (iii) an increase in Puerto Rico related to additional capacity agreements with third-party internet providers;
- An increase in network-related expenses of \$4.9 million or 10.4%, primarily due to an increase in network maintenance costs in Chile;
- An increase of \$4.1 million due to the impact of favorable nonrecurring adjustments that were recorded in Chile during the fourth quarter of 2014 related to the reassessment of certain accrued liabilities; and
- An increase in outsourced labor and professional fees of \$3.2 million or 9.5%, primarily due to higher call center costs in Chile.

	Year ended I	December 31,	Increase (d	increase (decrease) (a)		
-	2014	2013	\$ %		%	
-		in millions				
Liberty Global Group:						
European Operations Division:						
U.K./Ireland (b)	\$ 3,224.8	\$ 1,870.6	\$ 1,354.2	72.4	(4.1)	
The Netherlands (c)	444.9	376.2	68.7	18.3	(6.0)	
Germany	623.8	631.5	(7.7)	(1.2)	(1.2)	
Belgium	890.1	875.8	14.3	1.6	1.9	
Switzerland/Austria	528.5	510.3	18.2	3.6	2.3	
Total Western Europe	5,712.1	4,264.4	1,447.7	33.9	(1.8)	
Central and Eastern Europe	500.0	513.5	(13.5)	(2.6)	(1.0)	
Central and other	65.3	56.2	9.1	16.2	17.0	
Total European Operations Division	6,277.4	4,834.1	1,443.3	29.9	(1.5)	
Corporate and other	61.6	57.7	3.9	6.8	4.1	
Intersegment eliminations	(28.6)	(77.6)	49.0	N.M.	N.M.	
Total Liberty Global Group	6,310.4	4,814.2	1,496.2	31.1	(0.5)	
LiLAC Group:						
Chile	392.6	467.2	(74.6)	(16.0)	(3.2)	
Puerto Rico	135.3	142.6	(7.3)	(5.1)	(5.1)	
Total LiLAC Group	527.9	609.8	(81.9)	(13.4)	(3.7)	
Inter-group eliminations	_	(1.3)	1.3	N.M.	N.M.	
Total operating expenses excluding share-based compensation expense	6,838.3	5,422.7	1,415.6	26.1	(0.9)	
Share-based compensation expense	7.6	12.1	(4.5)	(37.2)		
Total	\$ 6,845.9	\$ 5,434.8	\$ 1,411.1	26.0		
=						

**Organic** 

N.M. — Not Meaningful.

<sup>(</sup>a) As further described under *Results of Operations* above, the organic decrease in our operating expenses during 2014 is impacted by the organic decrease in Virgin Media's operating expenses. Excluding the impact of Virgin Media, the organic increase (decrease) in (i) U.K./Ireland's operating expenses would have been (3.4%), (ii) Liberty Global Group's operating expenses would have been 1.4% and (iii) our total operating expenses excluding share-based compensation expense would have been 0.6%.

<sup>(</sup>b) The amount presented for 2013 includes the post-acquisition operating expenses of Virgin Media from June 8, 2013 through December 31, 2013.

<sup>(</sup>c) The amount presented for 2014 includes the post-acquisition operating expenses of Ziggo from November 12, 2014 through December 31, 2014.

European Operations Division. The European Operations Division's operating expenses (exclusive of share-based compensation expense) increased \$1,443.3 million or 29.9% during 2014, as compared to 2013. This increase includes \$1,393.8 million attributable to the impact of the Virgin Media Acquisition, the Ziggo Acquisition and other less significant acquisitions. Excluding the effects of acquisitions and FX, the European Operations Division's operating expenses decreased \$73.2 million or 1.5%. This decrease includes the following factors:

- A decrease in network-related expenses of \$96.4 million or 13.2%, due in part to a retroactive reduction in U.K. local authority charges for network infrastructure following a review by the U.K. government that resulted in a benefit of \$46.7 million during 2014. This benefit consists of (i) a \$35.3 million nonrecurring benefit related to periods prior to the third quarter of 2014, of which \$33.5 million was recorded during the third quarter of 2014, and (ii) benefits of \$5.6 million and \$5.8 million related to the third and fourth quarters of 2014, respectively. The decrease in network-related expenses also includes the net effect of (a) decreased network and customer premises equipment maintenance costs, predominantly in Switzerland/Austria, U.K./Ireland and the Netherlands, (b) lower outsourced labor costs associated with customer-facing activities, primarily in the Netherlands and U.K./Ireland, (c) lower duct and pole rental costs, primarily in Belgium, and (d) higher network and customer premises equipment maintenance costs, predominantly in the European Operations Division's central operations;
- An increase in programming and copyright costs of \$58.3 million or 4.0%, resulting from an increase in programming costs associated with (i) growth in digital video services, predominantly in U.K./Ireland and Belgium and, to a lessor extent, Switzerland/Austria and Germany and (ii) increased costs for sports rights, predominantly in U.K./Ireland and, to a lesser extent, Romania. These increases were partially offset by the \$44.7 million net impact of certain nonrecurring adjustments related to the settlement or reassessment of operational contingencies. The nonrecurring adjustments recorded during 2014 resulted in lower costs of (a) \$16.9 million in Belgium and \$7.0 million in Poland during the first quarter, (b) \$10.6 million in U.K./Ireland during the second quarter, (c) an aggregate of \$7.3 million in Belgium, Switzerland/Austria and the Netherlands during the third quarter and (d) \$2.3 million in the Netherlands during the fourth quarter. During 2013, the aggregate impact of similar reassessments and settlements, which included increases in Belgium and Poland that were largely offset by a decrease in the Netherlands, resulted in a net cost increase of \$0.6 million;
- An increase in installation and other direct costs of \$23.1 million associated with B2B services in U.K./Ireland;
- A decrease in outsourced labor and professional fees of \$17.6 million or 5.7%, primarily due to the net effect of (i) lower call center costs, predominantly in Belgium, U.K./Ireland, Switzerland/Austria and the Netherlands, (ii) lower consulting costs in Germany and Belgium and (iii) higher call center costs in Germany;
- A decrease in mobile access and interconnect costs of \$17.0 million or 2.3%, primarily due to the net effect of (i) increased costs in U.K./Ireland and Belgium attributable to mobile subscriber growth, (ii) decreased costs resulting from lower rates, primarily in U.K./Ireland, Germany, Belgium and the Netherlands, (iii) lower call volumes, predominantly in U.K./ Ireland and, to a lesser extent, Germany and the Netherlands, (iv) decreased costs associated with the U.K.'s non-cable subscriber base and (v) a \$2.6 million decrease in Belgium due to the impact of an accrual release in the first quarter of 2014 associated with the reassessment of an operational contingency;
- A decrease in mobile handset costs of \$15.8 million, primarily due to the net effect of (i) a decrease in mobile handset costs as a result of continued growth of SIM-only contracts, predominantly in U.K./Ireland, (ii) an increase in costs associated with subscriber promotions involving free or heavily-discounted handsets in Belgium and (iii) a net increase in mobile handset sales to third-party retailers, as increases in Switzerland/Austria and U.K./Ireland were only partially offset by a decrease in Belgium;
- A decrease in personnel costs of \$15.4 million or 2.1%, primarily due to the net effect of (i) decreased staffing levels, primarily as a result of integration and reorganization activities in the U.K. following the Virgin Media Acquisition, (ii) annual wage increases, primarily in U.K./Ireland, Germany, the Netherlands and Belgium, and (iii) higher incentive compensation costs, primarily in U.K./Ireland. Additionally, changes in the proportion of capitalizable activities during 2014 resulted in a net decrease in personnel costs, primarily due to the net effect of (a) lower costs in Germany and (b) higher costs in U.K./Ireland;
- A decrease in certain direct costs of \$14.2 million associated with the U.K.'s non-cable subscriber base;
- A decrease in bad debt and collection expenses of \$12.6 million or 9.8%, with most of the declines occurring in Germany, the Netherlands, the Czech Republic and Hungary; and

• A net increase resulting from individually insignificant changes in other operating expense categories.

*LiLAC Group*. The LiLAC Group's operating expenses (exclusive of share-based compensation expense) decreased \$81.9 million or 13.4% during 2014, as compared to 2013. Excluding the effects of FX, the LiLAC Group's operating expenses decreased \$22.4 million or 3.7%. This decrease includes the following factors:

- An increase in programming and copyright costs of \$17.3 million or 7.2%, primarily associated with (i) growth in Chile's digital cable services and (ii) a \$5.2 million increase arising from foreign currency exchange rate fluctuations with respect to Chile's U.S. dollar denominated programming contracts. During 2014, \$39.9 million or 27.6% of Chile's programming costs were denominated in U.S. dollars;
- A decrease in facilities expenses of \$11.6 million or 68.9%, primarily due to lower tower and real estate rental costs in Chile, as the fair value of all remaining payments due under these leases was included in the restructuring charges recorded during the third and fourth quarters of 2013 in connection with certain strategic changes that were implemented with regard to Chile's mobile operations, as further described in note 9 to our consolidated financial statements;
- A decrease in outsourced labor and professional fees of \$5.6 million or 10.4%, primarily attributable to the net effect of (i) lower costs associated with the network operating center related to Chile's mobile operations, (ii) higher call center costs in Chile and (iii) the favorable impact of a \$3.1 million nonrecurring charge recorded during the second quarter of 2013 to provide for Chile's mandated share of severance and other labor-related obligations that were incurred by a VTR contractor in connection with such contractor's bankruptcy;
- A decrease in mobile access and interconnect costs of \$5.4 million, primarily due to the net effect of (i) lower mobile access charges due to the impacts of lower contractual rates in Chile, (ii) an increase in interconnect costs in Chile resulting from the net effect of (a) higher call volumes and (b) lower rates; and (iii) lower access costs in Puerto Rico due to the migration of certain fixed-line telephony customers from a third-party network to Puerto Rico's network;
- A decrease in mobile handset costs of \$5.1 million or 23.0% in Chile, primarily attributable to (i) a decrease of \$4.2 million related to the impact of the liquidation or write-off of slow moving or obsolete mobile handsets and wireless network adaptors in 2013 and (ii) a decrease in mobile handset sales due to a reduced emphasis on prepaid plans;
- A decrease of \$4.7 million in Chile due to the favorable impact of nonrecurring adjustments during the fourth quarter of 2014 related to the reassessment of certain accrued liabilities;
- A decrease in network-related expenses of \$3.5 million or 6.6% primarily due to the net effect of (i) a higher proportion of capitalizable activities during 2014 in Puerto Rico resulting from increased activity related to network upgrades and improvements, (ii) lower pole rental costs in Chile, (iii) higher network and customer premises equipment maintenance costs in Chile and (iv) higher outsourced labor costs associated with customer-facing activities in Puerto Rico; and
- A decrease in bad debt and collection expenses of \$3.2 million or 6.2%, largely in Chile. The decrease in Chile is primarily due to more selective credit acceptance policies.

# SG&A Expenses of our Reportable Segments

SG&A expenses — 2015 compared to 2014

	Year ended	December 31,	Increase (	decrease)	Organic increase (decrease)
	2015	2014	\$	%	%
		in millions			
Liberty Global Group:					
European Operations Division:					
U.K./Ireland	\$ 877.3	\$ 949.4	\$ (72.1)	(7.6)	0.2
The Netherlands (a) (b)	381.1	195.7	185.4	94.7	(16.3)
Germany	346.4	409.5	(63.1)	(15.4)	1.1
Belgium	245.3	264.3	(19.0)	(7.2)	10.9
Switzerland/Austria	234.9	261.2	(26.3)	(10.1)	(2.7)
Total Western Europe	2,085.0	2,080.1	4.9	0.2	(0.2)
Central and Eastern Europe	162.9	176.5	(13.6)	(7.7)	10.3
Central and other	199.7	210.3	(10.6)	(5.0)	14.0
Total European Operations Division	2,447.6	2,466.9	(19.3)	(0.8)	1.8
Corporate and other	212.8	221.2	(8.4)	(3.8)	2.0
Intersegment eliminations	0.4	(0.3)	0.7	N.M.	N.M.
Total Liberty Global Group	2,660.8	2,687.8	(27.0)	(1.0)	1.8
LiLAC Group:					
LiLAC Division:					
Chile	140.6	154.9	(14.3)	(9.2)	4.3
Puerto Rico (b) (c)	46.4	41.9	4.5	10.7	(7.8)
Total LiLAC Division	187.0	196.8	(9.8)	(5.0)	1.7
Corporate and other	4.3	3.1	1.2	38.7	38.7
Total LiLAC Group	191.3	199.9	(8.6)	(4.3)	2.3
Total SG&A expenses excluding share-based compensation expense	2,852.1	2,887.7	(35.6)	(1.2)	1.8
Share-based compensation expense	314.8	249.6	65.2	26.1	
Total	\$ 3,166.9	\$ 3,137.3	\$ 29.6	0.9	

<sup>(</sup>a) The amount presented for 2014 includes the post-acquisition SG&A expenses of Ziggo from November 12, 2014 through December 31, 2014.

# N.M. — Not Meaningful.

General. SG&A expenses include human resources, information technology, general services, management, finance, legal and sales and marketing costs, share-based compensation and other general expenses. We do not include share-based compensation in the following discussion and analysis of the SG&A expenses of our reportable segments as share-based compensation expense is not included in the performance measures of our reportable segments. Share-based compensation expense is discussed under Discussion and Analysis of Our Consolidated Operating Results below. As noted under Operating Expenses of our Reportable Segments above, we are subject to inflationary pressures with respect to our labor and other costs and foreign currency exchange

<sup>(</sup>b) As further described under *Results of Operations* above, our organic growth rates are impacted by the methodology we use to estimate the impact of an acquisition. This impact is more pronounced in the Netherlands, where the acquired company (Ziggo) is significantly larger than our legacy operations in the Netherlands.

<sup>(</sup>c) The amount presented for 2015 includes the post-acquisition SG&A expenses of Choice, which was acquired on June 3, 2015.

risk with respect to non-functional currency expenses. For additional information concerning our foreign currency exchange risks see *Quantitative and Qualitative Disclosures about Market Risk*—Foreign Currency Risk below.

European Operations Division. The European Operations Division's SG&A expenses (exclusive of share-based compensation expense) decreased \$19.3 million or 0.8% during 2015, as compared to 2014. This decrease includes \$286.7 million attributable to the impact of the Ziggo Acquisition and other less significant acquisitions. Excluding the effects of acquisitions and FX, the European Operations Division's SG&A expenses increased \$43.9 million or 1.8%. This increase includes the following factors:

- An increase in outsourced labor and professional fees of \$33.7 million or 20.5%, primarily due to the net effect of (i) increased consulting costs associated with (a) scale initiatives in the areas of information technology and finance in the European Operations Division's central operations and (b) strategic initiatives in U.K./Ireland, (ii) the positive impact of a \$7.8 million increase associated with the nonrecurring consulting fee that was incurred during the third quarter of 2014 in connection with the reduction in local authority charges for certain elements of network infrastructure in the U.K., as discussed under *Operating Expenses of our Reportable Segments* above, (iii) increased consulting costs related to integration activities in (1) Belgium of \$9.0 million and (2) the Netherlands and the European Operations Division's central operations of \$1.6 million, (iv) decreased consulting costs related to strategic initiatives in Germany, (v) decreased legal costs in U.K./Ireland and (vi) an increase of \$2.7 million in U.K./Ireland associated with the nonrecurring consulting fee that was incurred during the fourth quarter of 2015 in connection with the settlement of disputes with mobile operators over amounts charged for voice traffic;
- An increase in information technology-related expenses of \$13.7 million or 11.8%, primarily due to higher software and other information technology-related maintenance costs, primarily in the European Operations Division's central operations and U.K./Ireland;
- A decrease of \$10.4 million due to an accrual release recorded during the second quarter of 2015 related to the resolution of a contingency associated with universal service obligations in Belgium;
- An increase in sales and marketing costs of \$6.0 million or 0.7%, primarily due to the net effect of (i) higher third-party sales commissions, primarily related to the net impact of an increase in Germany that was only partially offset by a decline in U.K./Ireland, (ii) lower costs associated with advertising campaigns, primarily related to decreases in the Netherlands and Germany that were only partially offset by increases in Belgium and U.K./Ireland, (iii) a decrease of \$4.7 million in Germany due to the impact of an accrual release in the third and fourth quarters of 2015 associated with the reassessment of an operational contingency and (iv) a \$3.8 million increase in third-party costs in the Netherlands and the European Operations Division's central operations related to rebranding activities following the Ziggo Acquisition; and
- A decrease in personnel costs of \$5.7 million or 0.6%, primarily due to the net effect of (i) increased staffing levels, primarily in the European Operations Division's central operations, Belgium, Germany and U.K./Ireland, (ii) lower incentive compensation costs, primarily related to decreases in U.K./Ireland and the Netherlands that were only partially offset by an increase in Belgium, (iii) annual wage increases, largely in U.K./Ireland, (iv) decreased costs in U.K./Ireland due to higher capitalized labor costs associated with the U.K. Network Extension, (v) lower costs related to certain employee benefits in the Netherlands, (vi) a \$3.2 million increase in the European Operations Division's central operations due to the impact of an accrual release recorded in the fourth quarter of 2014 associated with the settlement of an operational contingency and (vii) higher temporary personnel costs in the Netherlands of \$2.0 million related to integration activities in connection with the Ziggo Acquisition.

*LiLAC Division*. The LiLAC Division's SG&A expenses (exclusive of share-based compensation expense) decreased \$9.8 million or 5.0%, during 2015, as compared to 2014. This decreases includes an increase of \$7.8 million attributable to the impact of the Choice Acquisition. Excluding the effects of this acquisition and FX, the LiLAC Division's SG&A expenses increased \$3.4 million or 1.7%. This increase includes the following factors:

- An increase in sales and marketing costs of \$3.7 million or 6.3%, primarily due to higher third-party sales commissions in Chile;
- A decrease of \$2.2 million, due to lower costs associated with the national gross receipts tax that was implemented in Puerto Rico in July 2014. In 2015, it was determined that the tax would not be continued beyond 2014;
- A decrease in outsourced labor and professional fees of \$1.9 million or 14.7%, primarily due to lower fees associated with legal proceedings in Puerto Rico;

- An increase of \$1.6 million due to the impact of favorable nonrecurring adjustments that were recorded in Chile during the fourth quarter of 2014 related to the reassessment of certain accrued liabilities; and
- An increase in personnel costs of \$0.1 million or 0.2%, primarily due to the net effect of (i) a decrease in Chile due to lower incentive compensation and severance costs and (ii) annual wage increases.

SG&A expenses — 2014 compared to 2013

	Year ended I	Decem	ıber 31,	Increa	se (decrease)	Organic increase (decrease) (a)
	2014	%	%			
		in r	nillions			
Liberty Global Group:						
European Operations Division:						
U.K./Ireland (b)	\$ 949.4	\$	504.0	\$ 445	.4 88.4	6.5
The Netherlands (c)	195.7		144.5	51.	.2 35.4	9.1
Germany	409.5		386.6	22	.9 5.9	5.9
Belgium	264.3		260.7	3.	.6 1.4	1.8
Switzerland/Austria	261.2		251.1	10	.1 4.0	3.0
Total Western Europe	2,080.1		1,546.9	533	.2 34.5	5.2
Central and Eastern Europe	176.5		174.0	2	.5 1.4	3.3
Central and other	210.3		182.5	27.	.8 15.2	18.8
Total European Operations Division	2,466.9		1,903.4	563	.5 29.6	6.3
Corporate and other	221.2		188.6	32	.6 17.3	17.2
Intersegment eliminations	(0.3)		(1.2)	0	.9 N.M.	N.M.
Total Liberty Global Group	2,687.8		2,090.8	597	.0 28.6	7.4
LiLAC Group:						
LiLAC Division:						
Chile	154.9		170.8	(15	.9) (9.3)	4.4
Puerto Rico	41.9		47.3	(5.	.4) (11.4)	(11.4)
Total LiLAC Division	196.8		218.1	(21	.3) (9.8)	1.0
Corporate and other	3.1		1.9	1.	.2 63.2	63.2
Total LiLAC Group	199.9		220.0	(20)	.1) (9.1)	1.5
Total SG&A expenses excluding share-based compensation expense	2,887.7		2,310.8	576	.9 25.0	6.8
Share-based compensation expense	249.6		288.6	(39	.0) (13.5)	
Total	\$ 3,137.3	\$	2,599.4	\$ 537.	.9 20.7	

<sup>(</sup>a) As further described under *Results of Operations* above, the organic increase in our SG&A expenses during 2014 is impacted by the organic increase in Virgin Media's SG&A expenses. Excluding the impact of Virgin Media, the organic increase in (i) U.K./Ireland's SG&A expenses would have been 2.4%, (ii) Liberty Global Group's SG&A expenses would have been 7.5% and (iii) our total SG&A expenses excluding share-based compensation expense would have been 6.5%.

N.M. — Not Meaningful.

<sup>(</sup>b) The amount presented for 2013 includes the post-acquisition SG&A expenses of Virgin Media from June 8, 2013 through December 31, 2013.

<sup>(</sup>c) The amount presented for 2014 includes the post-acquisition SG&A expenses of Ziggo from November 12, 2014 through December 31, 2014.

European Operations Division. The European Operations Division's SG&A expenses (exclusive of share-based compensation expense) increased \$563.5 million or 29.6% during 2014, as compared to 2013. This increase includes \$412.2 million attributable to the impact of the Virgin Media Acquisition, the Ziggo Acquisition and other less significant acquisitions. Excluding the effects of acquisitions and FX, the European Operations Division's SG&A expenses increased \$120.5 million or 6.3%. This increase includes the following factors:

- An increase in information technology-related expenses of \$41.4 million or 51.2%, largely due to higher software and
  other information technology-related maintenance costs, primarily in U.K./Ireland, the European Operations Division's
  central operations, Germany and Belgium;
- An increase in sales and marketing costs of \$35.4 million or 5.3%, primarily due to the net effect of (i) higher costs associated with advertising campaigns, predominantly in U.K./Ireland, Germany, the Netherlands and Switzerland/Austria, and (ii) a decrease in third-party sales commissions, primarily attributable to the net impact of (a) decreases in U.K./Ireland and Switzerland/Austria and (b) an increase in Germany;
- An increase in personnel costs of \$32.3 million or 4.2%, due to the net effect of (i) higher incentive compensation costs predominantly in U.K./Ireland and, to a lesser extent, the European Operations Division's central operations and the Netherlands, (ii) decreased staffing levels in the U.K. as a result of integration and reorganization activities following the Virgin Media Acquisition, (iii) increased staffing levels in the European Operations Division's central operations, Germany, the Netherlands and Switzerland/Austria, (iv) annual wage increases, mostly in U.K./Ireland, the Netherlands, Germany, the European Operations Division's central operations and Belgium, and (v) a \$3.5 million decrease in the European Operations Division's central operations due to the impact of an accrual release in the fourth quarter of 2014 associated with the settlement of an operational contingency; and
- An increase in outsourced labor and professional fees of \$22.0 million or 16.1%, primarily due to (i) increased consulting costs associated with scale initiatives in the areas of information technology and finance, primarily in the European Operations Division's central operations, Switzerland/Austria and Germany, and (ii) a \$7.3 million increase associated with a nonrecurring consulting fee incurred during the third quarter of 2014 in connection with the retroactive reduction in U.K. local authority charges, as discussed under Operating Expenses of our Reportable Segments above.

*LiLAC Division*. The LiLAC Division's SG&A expenses (exclusive of share-based compensation expense) decreased \$21.3 million or 9.8%, during 2014, as compared to 2013. Excluding the effects of FX, the LiLAC Division's SG&A expenses increased \$2.1 million or 1.0%. This increase includes the following factors:

- An increase in sales and marketing costs of \$12.8 million or 22.9%, primarily due to the net effect of (i) higher third-party sales commissions and advertising costs related to Chile's cable operations and (ii) lower third-party sales commissions related to Chile's mobile operations;
- A decrease in outsourced labor and professional fees of \$6.2 million or 30.5%, primarily due to lower fees associated with legal proceedings in Puerto Rico;
- A decrease of \$1.9 million due to the favorable impact of nonrecurring adjustments in Chile during the fourth quarter of 2014 related to the reassessment of certain accrued liabilities;
- A decrease in personnel costs of \$1.5 million or 2.1%, primarily due to the net effect of (i) a decrease due to lower staffing levels in Chile, (ii) an increase due to higher incentive compensation costs in Chile, (iii) an increase due to higher severance costs and (iv) an increase due to higher staffing levels in Puerto Rico; and
- A net decrease resulting from individually insignificant changes in various other SG&A expense categories.

# Adjusted OIBDA of our Reportable Segments

Adjusted OIBDA is the primary measure used by our chief operating decision maker to evaluate segment operating performance. For the definition of this performance measure and for a reconciliation of total segment Adjusted OIBDA to our loss from continuing operations before income taxes, see note 18 to our consolidated financial statements.

Adjusted OIBDA — 2015 compared to 2014

	Year ended I	December 31,	Increase (d	Organic increase (decrease)		
	2015	2014	\$	%	%	
		in millions				
Liberty Global Group:						
European Operations Division:						
U.K./Ireland	\$ 3,162.1	\$ 3,235.7	\$ (73.6)	(2.3)	6.2	
The Netherlands (a) (b)	1,519.5	857.9	661.6	77.1	(2.0)	
Germany	1,502.1	1,678.2	(176.1)	(10.5)	7.1	
Belgium	990.3	1,125.0	(134.7)	(12.0)	5.6	
Switzerland/Austria	1,040.1	1,056.4	(16.3)	(1.5)	6.0	
Total Western Europe	8,214.1	7,953.2	260.9	3.3	5.4	
Central and Eastern Europe	474.0	583.0	(109.0)	(18.7)	(2.7)	
Central and other	(289.2)	(282.7)	(6.5)	(2.3)	(22.3)	
Total European Operations Division	8,398.9	8,253.5	145.4	1.8	4.2	
Corporate and other	(222.6)	(212.0)	(10.6)	(5.0)	(9.0)	
Intersegment eliminations		4.0	(4.0)	N.M.	N.M.	
Total Liberty Global Group	8,176.3	8,045.5	130.8	1.6	4.0	
LiLAC Group:						
LiLAC Division:						
Chile	328.1	351.0	(22.9)	(6.5)	6.9	
Puerto Rico (b) (c)	167.2	128.9	38.3	29.7	13.1	
Total LiLAC Division	495.3	479.9	15.4	3.2	8.6	
Corporate and other	(4.3)	(3.1)	(1.2)	(38.7)	(38.7)	
Total LiLAC Group	491.0	476.8	14.2	3.0	8.4	
Total	\$ 8,667.3	\$ 8,522.3	\$ 145.0	1.7	4.3	

<sup>(</sup>a) The amount presented for 2014 includes the post-acquisition Adjusted OIBDA of Ziggo from November 12, 2014 through December 31, 2014.

N.M. — Not Meaningful.

<sup>(</sup>b) As further described under *Results of Operations* above, our organic growth rates are impacted by the methodology we use to estimate the impact of an acquisition. This impact is more pronounced in the Netherlands, where the acquired company (Ziggo) is significantly larger than our legacy operations in the Netherlands.

<sup>(</sup>c) The amount presented for 2015 includes the post-acquisition Adjusted OIBDA of Choice, which was acquired on June 3, 2015.

	Year en	led D	<b>ece</b> i	mber 31,		Increase (	decrease)	Organic increase (decrease) (a)
	2014		2013			\$	%	%
			in	millions				
Liberty Global Group:								
European Operations Division:								
U.K./Ireland (b)	\$ 3,23	5.7	\$	1,742.8	\$	1,492.9	85.7	13.0
The Netherlands (c)	85	7.9		721.7		136.2	18.9	(1.0)
Germany	1,67	8.2		1,541.1		137.1	8.9	9.0
Belgium	1,12	5.0		1,049.4		75.6	7.2	6.9
Switzerland/Austria	1,05	6.4		1,005.7		50.7	5.0	3.6
Total Western Europe	7,95	3.2		6,060.7		1,892.5	31.2	7.7
Central and Eastern Europe	58	3.0		584.5		(1.5)	(0.3)	1.5
Central and other	(28	2.7)		(239.1)		(43.6)	(18.2)	(18.6)
Total European Operations Division	8,25	3.5		6,406.1		1,847.4	28.8	6.7
Corporate and other	(21	2.0)		(169.2)		(42.8)	(25.3)	(24.4)
Intersegment eliminations		4.0		44.8		(40.8)	N.M.	N.M.
Total Liberty Global Group	8,04	5.5		6,281.7		1,763.8	28.1	5.5
LiLAC Group:								
LiLAC Division:								
Chile	35	1.0		353.6		(2.6)	(0.7)	14.3
Puerto Rico	12	8.9		107.3		21.6	20.1	20.1
Total LiLAC Division	47	9.9		460.9		19.0	4.1	15.8
Corporate and other	(	3.1)		(1.9)		(1.2)	(63.2)	(63.2)
Total LiLAC Group	47	6.8		459.0		17.8	3.9	15.5
Total	\$ 8,52	2.3	\$	6,740.7	\$	1,781.6	26.4	6.2
•								

<sup>(</sup>a) As further described under *Results of Operations* above, the organic increase in our Adjusted OIBDA during 2015 is impacted by the organic increase in Virgin Media's Adjusted OIBDA. Excluding the impact of Virgin Media, the organic increase in (i) U.K./Ireland's Adjusted OIBDA would have been 4.6%, (ii) Liberty Global Group's Adjusted OIBDA would have been 2.7% and (iii) our total Adjusted OIBDA would have been 3.8%.

N.M. — Not Meaningful.

<sup>(</sup>b) The amount presented for 2013 includes the post-acquisition Adjusted OIBDA of Virgin Media from June 8, 2013 through December 31, 2014.

<sup>(</sup>c) The amount presented for 2014 includes the post-acquisition Adjusted OIBDA of Ziggo from November 12, 2014 through December 31, 2014.

The following table sets forth the Adjusted OIBDA margins (Adjusted OIBDA divided by revenue) of each of our reportable segments:

	Year e	31,	
	2015	2014	2013
		%	_
Liberty Global Group:			
European Operations Division:			
U.K./Ireland	44.8	43.7	42.3
The Netherlands	55.3	57.3	58.1
Germany	62.6	61.9	60.2
Belgium	49.0	49.4	48.0
Switzerland/Austria	59.2	57.2	56.9
Total Western Europe.	51.4	50.5	51.1
Central and Eastern Europe	44.4	46.3	46.0
Total European Operations Division	49.3	48.6	48.7
LiLAC Group:			
LiLAC Division:			
Chile	39.1	39.1	35.7
Puerto Rico	44.1	42.1	36.1
Total LiLAC Division.	40.7	39.8	35.8

In addition to organic changes in the revenue, operating expenses and SG&A expenses of our reportable segments, the Adjusted OIBDA margins presented above include the impact of acquisitions, the most significant of which are the Choice Acquisition, the Ziggo Acquisition and the Virgin Media Acquisition. In this regard, (i) the Adjusted OIBDA margins of the Netherlands and Puerto Rico during 2015 were adversely impacted by the inclusion of Ziggo and Choice, respectively, each of which generated relatively lower Adjusted OIBDA margins than the respective legacy operations and (ii) the Adjusted OIBDA margin of the European Operations Division during 2014 was negatively impacted by the full-year inclusion of the relatively lower Adjusted OIBDA margin of Virgin Media. For discussion of the factors contributing to other changes in the Adjusted OIBDA margins of our reportable segments, see the above analyses of the revenue, operating expenses and SG&A expenses of our reportable segments.

# Discussion and Analysis of our Consolidated Operating Results

#### General

For more detailed explanations of the changes in our revenue, operating expenses and SG&A expenses, including the impacts of nonrecurring items, see the *Discussion and Analysis of our Reportable Segments* above.

### 2015 compared to 2014

Revenue

Our revenue by major category is set forth below:

	Year ended December 31,					Increase (d	increase (decrease)	
		2015	5 2014			\$	%	%
			ii	n millions				
Subscription revenue (a):								
Video	\$	6,383.6	\$	6,538.3	\$	(154.7)	(2.4)	0.4
Broadband internet		5,079.7		4,718.5		361.2	7.7	9.4
Fixed-line telephony		3,162.0		3,259.5		(97.5)	(3.0)	(0.8)
Cable subscription revenue		14,625.3		14,516.3		109.0	0.8	3.1
Mobile subscription revenue (b)		1,037.3		1,085.6		(48.3)	(4.4)	3.6
Total subscription revenue		15,662.6		15,601.9		60.7	0.4	3.1
B2B revenue (c)		1,560.5		1,501.3		59.2	3.9	6.4
Other revenue (b) (d)		1,056.9		1,145.1		(88.2)	(7.7)	6.7
Total	\$	18,280.0	\$	18,248.3	\$	31.7	0.2	3.6

<sup>(</sup>a) Subscription revenue includes amounts received from subscribers for ongoing services, excluding installation fees and late fees. Subscription revenue from subscribers who purchase bundled services at a discounted rate is generally allocated proportionally to each service based on the standalone price for each individual service. As a result, changes in the standalone pricing of our cable and mobile products or the composition of bundles can contribute to changes in our product revenue categories from period to period.

*Total revenue*. Our consolidated revenue increased \$31.7 million during 2015, as compared to 2014. This increase includes (i) an increase of \$1,866.2 million attributable to the impact of acquisitions and (ii) a decrease of \$50.0 million attributable to the U.K. Non-Cable Disposal and another less significant disposition. Excluding the effects of acquisitions, dispositions and FX, our consolidated revenue increased \$658.5 million or 3.6%.

<sup>(</sup>b) Mobile subscription revenue excludes mobile interconnect revenue of \$212.7 million and \$245.0 million during 2015 and 2014, respectively. Mobile interconnect revenue and revenue from mobile handset sales are included in other revenue.

<sup>(</sup>c) B2B revenue includes revenue from business broadband internet, video, voice, mobile and data services offered to medium to large enterprises and, on a wholesale basis, to other operators. We also provide services to certain SOHO subscribers. SOHO subscribers pay a premium price to receive expanded service levels along with video, broadband internet, fixed-line telephony or mobile services that are the same or similar to the mass marketed products offered to our residential subscribers. Revenue from SOHO subscribers, which is included in cable subscription revenue, aggregated \$321.8 million and \$220.7 million during 2015 and 2014, respectively. On an organic basis, our total B2B revenue, including revenue from SOHO subscribers, increased 11.4% during 2015, as compared to 2014. A portion of the increase in our SOHO revenue is attributable to the conversion of our residential subscribers to SOHO subscribers.

<sup>(</sup>d) Other revenue includes, among other items, interconnect, mobile handset sales, channel carriage fee and installation revenue.

*Subscription revenue.* The details of the change in our consolidated subscription revenue for 2015, as compared to 2014, are as follows (in millions):

Increase in cable subscription revenue due to change in:

Total	\$ 60.7
Impact of FX	(2,125.9)
Impact of acquisitions.	1,701.2
Total increase in subscription revenue	485.4
Increase in mobile revenue	39.5
Total increase in cable subscription revenue	445.9
ARPU	209.6
Average number of RGUs.	\$ 236.3

Excluding the effects of acquisitions and FX, our consolidated cable subscription revenue increased \$445.9 million or 3.1% during 2015, as compared to 2014. This increase in subscription revenue is attributable to the net effect of (i) an increase from broadband internet services of \$443.0 million or 9.4%, attributable to an increase in the average number of broadband internet RGUs and higher ARPU from broadband internet services, (ii) an increase from video services of \$28.3 million or 0.4%, attributable to the net effect of (a) higher ARPU from video services and (b) a decline in the average number of video RGUs, and (iii) a decrease from fixed-line telephony services of \$25.4 million or 0.8%, attributable to the net effect of (1) lower ARPU from fixed-line telephony services and (2) an increase in the average number of fixed-line telephony RGUs.

Excluding the effects of acquisitions and FX, our consolidated mobile subscription revenue increased \$39.5 million or 3.6% during 2015, as compared to 2014. This increase is primarily due to the net effect of (i) increases in Belgium, Chile, Switzerland and the Netherlands and (ii) a decline in the U.K.

*B2B revenue*. Excluding the effects of acquisitions and FX, our consolidated B2B revenue increased \$95.9 million or 6.4% during 2015, as compared to 2014. This increase is primarily due to the net effect of (i) increases in the U.K., Belgium, Switzerland, Germany and Poland and (ii) a decrease in the Netherlands.

Other revenue. Excluding the effects of acquisitions, dispositions and FX, our consolidated other revenue increased \$77.2 million or 6.7% during 2015, as compared to 2014. This increase is primarily attributable to the net effect of (i) an increase in mobile handset sales, primarily associated with the introduction of Split-contract Programs in the U.K. and Belgium, (ii) a decrease in fixed-line interconnect revenue, primarily in Chile, Germany and the U.K., (iii) a decrease in installation revenue, primarily in the U.K. and the Netherlands, and (iv) a decrease in set-top box sales, primarily in Belgium and the Netherlands.

For additional information concerning the changes in our subscription, B2B and other revenue, see *Discussion and Analysis of our Reportable Segments* — *Revenue* — *2015 compared to 2014* above. For information regarding the competitive environment in certain of our markets, see *Overview* above.

Our revenue by major category for the Liberty Global Group is set forth below:

	Year ended l	December 31,	Increase (	(decrease)	Organic increase (decrease)
	2015	2014	\$	%	%
		in millions			
Liberty Global Group:					
Subscription revenue:					
Video	\$ 5,857.3	\$ 6,008.4	\$ (151.1)	(2.5)	_
Broadband internet	4,676.2	4,338.4	337.8	7.8	9.4
Fixed-line telephony	2,997.1	3,071.1	(74.0)	(2.4)	(0.6)
Cable subscription revenue	13,530.6	13,417.9	112.7	0.8	2.9
Mobile subscription revenue (a)	1,001.7	1,061.2	(59.5)	(5.6)	2.2
Total subscription revenue	14,532.3	14,479.1	53.2	0.4	2.8
B2B revenue (b)	1,551.2	1,497.5	53.7	3.6	6.1
Other revenue	979.2	1,067.1	(87.9)	(8.2)	6.9
Total Liberty Global Group	\$ 17,062.7	\$ 17,043.7	\$ 19.0	0.1	3.4

<sup>(</sup>a) Mobile subscription revenue excludes mobile interconnect revenue of \$209.2 million and \$242.2 million during 2015 and 2014, respectively. Mobile interconnect revenue and revenue from mobile handset sales are included in other revenue.

Our revenue by major category for the LiLAC Group is set forth below:

	Yea	ar ended l	Dece	mber 31,		Increase (d	decrease)	Organic increase (decrease)
		2015		2014		\$	%	%
			in	millions				
LiLAC Group:								
Subscription revenue:								
Video	\$	526.3	\$	529.9	\$	(3.6)	(0.7)	5.5
Broadband internet		403.5		380.1		23.4	6.2	9.3
Fixed-line telephony		164.9		188.4		(23.5)	(12.5)	(3.2)
Cable subscription revenue		1,094.7		1,098.4		(3.7)	(0.3)	5.3
Mobile subscription revenue (a)		35.6		24.4		11.2	45.9	66.6
Total subscription revenue		1,130.3		1,122.8		7.5	0.7	6.7
B2B revenue (b)		9.3		3.8		5.5	144.7	110.0
Other revenue		77.7		78.0		(0.3)	(0.4)	3.9
Total LiLAC Group	\$	1,217.3	\$	1,204.6	\$	12.7	1.1	6.8

<sup>(</sup>a) Mobile subscription revenue excludes mobile interconnect revenue of \$3.5 million and \$2.8 million during 2015 and 2014, respectively. Mobile interconnect revenue and revenue from mobile handset sales are included in other revenue.

<sup>(</sup>b) Revenue from SOHO subscribers, which is included in cable subscription revenue, aggregated \$301.2 million and \$203.4 million during 2015 and 2014, respectively. On an organic basis, the Liberty Global Group's total B2B revenue, including revenue from SOHO subscribers, increased 11.2% during 2015, as compared to 2014.

<sup>(</sup>b) Revenue from SOHO subscribers, which is included in cable subscription revenue, aggregated \$20.6 million and \$17.3 million during 2015 and 2014, respectively. On an organic basis, the LiLAC Group's total B2B revenue, including revenue from SOHO subscribers, increased 21.9% during 2015, as compared to 2014.

#### Operating expenses

Our operating expenses decreased \$81.9 million during 2015, as compared to 2014. This decrease includes (i) an increase of \$601.9 million attributable to the impact of the Ziggo Acquisition, the Choice Acquisition and other less significant acquisitions and (ii) a decrease of \$55.4 million attributable to the U.K. Non-Cable Disposal and another less significant disposition. Our operating expenses include share-based compensation expense, which decreased \$4.2 million during 2015. For additional information, see the discussion under *Share-based compensation expense* below. Excluding the effects of acquisitions, dispositions, FX and share-based compensation expense, our operating expenses increased \$244.2 million or 3.6% during 2015, as compared to 2014. This increase is primarily attributable to the net effect of (a) an increase in programming and copyright costs, (b) a decrease in personnel costs, (c) an increase in outsourced labor and professional fees, (d) an increase in mobile handset costs, (e) an increase in information technology-related costs, (f) a decrease in interconnect costs and (g) a decrease in network-related expenses. Certain of these changes include the impact of a \$20.1 million increase in integration-related costs in the Netherlands. For additional information regarding the changes in our operating expenses, see *Discussion and Analysis of our Reportable Segments — Operating Expenses of our Reportable Segments* above.

## SG&A expenses

Our SG&A expenses increased \$29.6 million during 2015, as compared to 2014. This increase includes \$294.5 million attributable to the impact of the Ziggo Acquisition, the Choice Acquisition and other less significant acquisitions. Our SG&A expenses include share-based compensation expense, which increased \$65.2 million during 2015. For additional information, see the discussion under *Share-based compensation expense* below. Excluding the effects of acquisitions, FX and share-based compensation expense, our SG&A expenses increased \$53.3 million or 1.8% during 2015, as compared to 2014. This increase is primarily due to the net effect of (i) an increase in outsourced labor and professional fees, including an increase in corporate costs of \$19.9 million associated with the Liberty 3.0 initiative, (ii) an increase in information technology-related expenses, (iii) an increase in sales and marketing costs and (iv) a decrease in personnel costs. Certain of these changes include the impact of a \$9.6 million increase in integration-related costs, primarily in the Netherlands and Belgium. For additional information regarding the changes in our SG&A expenses, see *Discussion and Analysis of our Reportable Segments — SG&A Expenses of our Reportable Segments* above.

Our share-based compensation expense is based on the share-based incentive awards held by our and our subsidiaries' employees, including awards issued by Liberty Global. A summary of our aggregate share-based compensation expense is set forth below:

	Ye	ear ended	nber 31,	
		2015		2014
		in mi	llions	
Liberty Global shares:				
Performance-based incentive awards (a)	\$	157.1	\$	129.9
Other share-based incentive awards		149.6		99.7
Total Liberty Global shares (b) (c)		306.7		229.6
Telenet share-based incentive awards (d)		9.2		14.6
Other		2.3		13.0
Total	\$	318.2	\$	257.2
Included in:				
Operating expense:				
Liberty Global Group	\$	3.1	\$	4.8
LiLAC Group		0.3		2.8
Total operating expense.		3.4		7.6
SG&A expense:				
Liberty Global Group		312.7		240.8
LiLAC Group (c) (e)		2.1		8.8
Total SG&A expense		314.8		249.6
Total	\$	318.2	\$	257.2

- (a) Includes share-based compensation expense related to (i) Liberty Global PSUs, (ii) the Challenge Performance Awards and (iii) the PGUs.
- (b) In connection with the Virgin Media Acquisition, we issued Virgin Media Replacement Awards to employees and former directors of Virgin Media in exchange for corresponding Virgin Media awards. Virgin Media recorded share-based compensation expense of \$54.1 million and \$55.8 million during 2015 and 2014, respectively, including compensation expense related to the Virgin Media Replacement Awards and new awards that were granted after the Virgin Media Replacement Awards were issued.
- (c) In connection with the LiLAC Transaction, the compensation committee of our board of directors approved the Award Modifications in accordance with the underlying share-based incentive plans. The objective of the compensation committee was to ensure a relatively unchanged intrinsic value of outstanding equity awards before and after the bonus issuance of the LiLAC Shares. The mechanism to modify outstanding share-based incentive awards, as approved by the compensation committee, utilized the Modification VWAPs. In order to determine if any incremental stock-based compensation expense should be recorded as a result of the Award Modifications, we are required to measure the changes in the fair values of the then outstanding share-based incentive awards using market prices immediately before and immediately after the Award Modifications. Due to declines in the share prices of our Class A and Class C Liberty Global Shares following the bonus issuance, the exercise prices of options, SARs and PSARs determined using the Modification VWAPs were lower than the exercise prices that would have resulted if the market prices immediately before and after the Award Modifications had been used. Accordingly, the Black-Scholes fair values of our options, SARs and PSARs increased as a result of the Award Modifications, resulting in incremental stock-based compensation expense of \$99.3 million. This amount includes \$69.3 million of expense recognized during the third and fourth quarters of 2015 related to awards that vested on or prior to December 31, 2015 and \$30.0 million of expense that will be recognized in future periods through 2019 as the related awards vest.
- (d) Represents the share-based compensation expense associated with Telenet's share-based incentive awards, which, at December 31, 2015, included (i) warrants and employee stock options (1,813,815 awards outstanding at a weighted average

exercise price of €42.17 (\$45.82)), (ii) performance-based specific stock option plans for the Chief Executive Officer (745,000 awards outstanding at a weighted average exercise price of €40.60 (\$44.12)), (iii) performance-based share award (82,747 awards outstanding) and (iv) an employee share purchase plan.

(e) The amount for 2015 includes the reversal of \$1.8 million of share-based compensation expense, primarily related to forfeitures of unvested PSUs during the first quarter of 2015.

For additional information concerning our share-based compensation, see note 13 to our consolidated financial statements.

Depreciation and amortization expense

The details of our depreciation and amortization expense are as follows:

	Y	ear ended	Dece	mber 31,	Increase (decrease)		
	2015		2014		\$		%
			in	millions			
Liberty Global Group	\$	5,609.4	\$	5,283.4	\$	326.0	6.2
LiLAC Group		216.4		216.7		(0.3)	(0.1)
Total	\$	5,825.8	\$	5,500.1	\$	325.7	5.9

Excluding the effects of FX, depreciation and amortization expense increased \$1,117.8 million or 20.3% during 2015, as compared to 2014. This increase is primarily due to the impact of the Ziggo Acquisition. In addition, a net increase resulted from (i) an increase associated with property and equipment additions related to the installation of customer premises equipment, the expansion and upgrade of our networks and other capital initiatives and (ii) a decrease associated with certain assets becoming fully depreciated, primarily in U.K./Ireland and, to a lesser extent, the Netherlands, Belgium, Germany, Chile and Switzerland/Austria.

Impairment, restructuring and other operating items, net

The details of our impairment, restructuring and other operating items, net, are as follows:

	Ye	Year ended December 31, 2015 2014 in millions					
		2015	- 2	2014			
Liberty Global Group	\$	154.3	\$	516.7			
LiLAC Group.		19.8		20.1			
Total	\$	174.1	\$	536.8			

The total for 2015 includes (i) restructuring charges of \$103.8 million, including (a) \$102.3 million of employee severance and termination costs related to certain reorganization activities, primarily in the Netherlands, U.K./Ireland, Germany, Switzerland/Austria and Puerto Rico, (b) contract termination charges of \$19.3 million, primarily in Belgium, Chile and Puerto Rico, and (c) a credit of \$17.0 million recorded by Telenet during the fourth quarter following the settlement of its DTT capacity contract obligations, the fair value of which were originally recorded during 2014 when Telenet discontinued the provision of DTT services, (ii) direct acquisition costs of \$49.8 million, primarily related to our pending acquisition of CWC, Telenet's acquisition of BASE, our acquisition of additional shares of ITV, the Choice Acquisition and the Ziggo Acquisition, (iii) impairment charges of \$24.8 million, primarily in U.K./Ireland, the Netherlands and Switzerland/Austria, and (iv) a \$23.1 million loss on the divestiture of our *Film1* channels.

We expect to record significant restructuring charges during 2016, due largely to our ongoing company-wide effort to optimize our operating model pursuant to Liberty 3.0. In addition, we expect to undertake restructuring programs in certain of our operating segments, including programs to be undertaken in connection with the integration of acquired entities.

The total for 2014 includes (i) direct acquisition costs of \$331.3 million, including (a) \$222.0 million that was accrued during the fourth quarter in connection with the settlement of certain third-party appeals of the German competition authority's 2011

decision to approve our acquisition of KBW and (b) \$84.1 million associated with the Ziggo Acquisition, (ii) restructuring charges of \$166.9 million, including (1) an \$86.1 million charge to record the fair value of Telenet's obligations under certain DTT capacity contracts following Telenet's decision to discontinue the provision of DTT services on March 31, 2014 and (2) \$60.4 million of employee severance and termination costs related to certain reorganization activities, primarily in U.K./Ireland, the Netherlands, Germany, Chile and the European Operations Division's central operations, and (iii) an impairment charge of \$68.7 million that was recorded by Ziggo during the fourth quarter of 2014 to reduce the carrying amount of certain of Ziggo's internal-use software assets to zero following our determination that these assets would have no future service potential for our combined operations in the Netherlands.

For information regarding our pending acquisition of CWC, the Choice Acquisition, the Ziggo Acquisition and the divestiture of our *Film1* channels, see note 4 to our consolidated financial statements. For information regarding Telenet's acquisition of BASE, see note 20. For information regarding our acquisition of additional shares of ITV, see note 6 to our consolidated financial statements.

For additional information regarding our restructuring charges, see note 14 to our consolidated financial statements. For additional information regarding our impairments, see *Critical Accounting Policies*, *Judgments and Estimates* — *Impairment of Property and Equipment and Intangible Assets* below.

Interest expense

The details of our interest expense are as follows:

	Y	ear ended l	Dece	ember 31,		Increase (d	lecrease)
·	2015		2014		2014 \$		%
				in millions			
Liberty Global Group	\$	2,284.1	\$	2,405.1	\$	(121.0)	(5.0)
LiLAC Group		157.9		140.4		17.5	12.5
Inter-group eliminations		(0.6)		(0.8)		0.2	N.M.
Total	\$	2,441.4	\$	2,544.7	\$	(103.3)	(4.1)

### N.M. — Not Meaningful.

Excluding the effects of FX, interest expense increased \$228.5 million or 9.0%. This increase is primarily attributable to the net effect of (i) higher average outstanding debt balances, largely due to debt incurred in connection with the Ziggo Acquisition, and (ii) lower weighted average interest rates related to the completion of certain financing transactions that resulted in extended maturities and net decreases to certain of our interest rates. For additional information regarding our outstanding indebtedness, see note 10 to our consolidated financial statements.

It is possible that the interest rates on (i) any new borrowings could be higher than the current interest rates on our existing indebtedness and (ii) our variable-rate indebtedness could increase in future periods. As further discussed in note 10 to our consolidated financial statements and under *Qualitative and Quantitative Disclosures about Market Risk* below, we use derivative instruments to manage our interest rate risks. As we do not apply hedge accounting to our interest rate derivative instruments, the impacts of these derivative instruments are not included in interest expense.

Our realized and unrealized gains or losses on derivative instruments include (i) unrealized changes in the fair values of our derivative instruments that are non-cash in nature until such time as the derivative contracts are fully or partially settled and (ii) realized gains or losses upon the full or partial settlement of the derivative contracts. The details of our realized and unrealized gains (losses) on derivative instruments, net, are as follows:

	Year ended December 31,		
	2015	2014	
	in mi	llions	
Cross-currency and interest rate derivative contracts:			
Liberty Global Group	\$ 855.7	\$ 252.5	
LiLAC Group	217.0	41.1	
Total cross-currency and interest rate derivative contracts (a)	1,072.7	293.6	
Equity-related derivative instruments - Liberty Global Group:			
ITV Collar	(222.6)	(77.4)	
Sumitomo Collar	(20.3)	(46.0)	
Lionsgate Forward	14.5		
Ziggo Collar (b)	_	(113.3)	
Other	0.7	0.4	
Total equity-related derivative instruments (c)	(227.7)	(236.3)	
Foreign currency forward contracts:			
Liberty Global Group	(9.0)	29.0	
LiLAC Group	10.3	2.6	
Total foreign currency forward contracts.	1.3	31.6	
Other - Liberty Global Group	0.9	(0.1)	
Total Liberty Global Group	619.9	45.1	
Total LiLAC Group	227.3	43.7	
Total	\$ 847.2	\$ 88.8	

<sup>(</sup>a) The gain during 2015 is primarily attributable to the net effect of (i) gains associated with decreases in the values of the euro, British pound sterling and Chilean peso relative to the U.S. dollar, (ii) losses associated with an increase in the value of the Swiss franc relative to the euro and (iii) gains associated with increases in market interest rates in the Chilean peso market. In addition, the gain during 2015 includes a net loss of \$9.3 million resulting from changes in our credit risk valuation adjustments. The gain during 2014 is primarily attributable to the net effect of (a) gains associated with decreases in the values of the euro, British pound sterling, Chilean peso and Swiss franc relative to the U.S. dollar, (b) losses associated with decreases in market interest rates in the euro, British pound sterling, Swiss franc and Chilean peso markets and (c) gains associated with decreases in the values of the Hungarian forint and Polish zloty relative to the euro. In addition, the gain during 2014 includes a net loss of \$120.9 million resulting from changes in our credit risk valuation adjustments.

For additional information concerning our derivative instruments, see notes 7 and 8 to our consolidated financial statements and *Quantitative and Qualitative Disclosures about Market Risk* below.

<sup>(</sup>b) Upon completion of the Ziggo Acquisition (see note 4 to our consolidated financial statements), the Ziggo Collar was terminated.

<sup>(</sup>c) For information concerning the factors that impact the valuations of our equity-related derivative instruments, see note 8 to our consolidated financial statements.

Our foreign currency transaction gains or losses primarily result from the remeasurement of monetary assets and liabilities that are denominated in currencies other than the underlying functional currency of the applicable entity. Unrealized foreign currency transaction gains or losses are computed based on period-end exchange rates and are non-cash in nature until such time as the amounts are settled. The details of our foreign currency transaction losses, net, are as follows:

	Year ended December 3			mber 31,
		2015		2014
		in mil	llion	s
Liberty Global Group:				
U.S. dollar denominated debt issued by euro functional currency entities	\$	(715.7)	\$	(481.5)
U.S. dollar denominated debt issued by a British pound sterling functional currency entity		(210.0)		(175.1)
British pound sterling denominated debt issued by a U.S. dollar functional currency entity		89.6		59.6
Intercompany payables and receivables denominated in a currency other than the entity's functional currency (a)		(68.8)		(299.0)
Euro denominated debt issued by a British pound sterling functional currency entity		8.1		
Cash and restricted cash denominated in a currency other than the entity's functional currency		(6.7)		(32.3)
Yen denominated debt issued by a U.S. dollar functional currency entity		2.0		109.2
Euro denominated debt issued by a U.S. dollar functional currency entity				72.2
Other		(24.3)		8.3
Total Liberty Global Group		(925.8)		(738.6)
LiLAC Group:				
U.S. dollar denominated debt issued by a Chilean peso functional currency entity		(215.8)		(137.1)
Intercompany payables and receivables denominated in a currency other than the entity's functional currency (b)		0.9		47.2
Other		(8.5)		(8.0)
Total LiLAC Group.		(223.4)		(97.9)
Total	\$	(1,149.2)	\$	(836.5)

<sup>(</sup>a) Amounts primarily relate to (i) loans between certain of our non-operating and operating subsidiaries in Europe, which generally are denominated in the currency of the applicable operating subsidiary, and (ii) loans between certain of our non-operating subsidiaries in the U.S. and Europe.

For information regarding how we manage our exposure to foreign currency risk, see *Quantitative and Qualitative Disclosures* about Market Risk — Foreign Currency Risk below.

<sup>(</sup>b) Amounts primarily relate to loans between certain of our subsidiaries in Europe and Chile.

Realized and unrealized gains due to changes in fair values of certain investments, net

Our realized and unrealized gains or losses due to changes in fair values of certain investments include unrealized gains or losses associated with changes in fair values that are non-cash in nature until such time as these gains or losses are realized through cash transactions. All of our investments that we account for using the fair value method are attributed to the Liberty Global Group. The details of our realized and unrealized gains due to changes in fair values of certain investments, net, are as follows:

	Year ended l	December 31,
	2015	2014
	in mi	llions
Investments (a):		
ITV	\$ 165.6	\$ 54.9
Lionsgate	(33.2)	
ITI Neovision	(17.0)	20.5
Sumitomo	(2.0)	(99.8)
Ziggo	_	224.0
Other, net	11.1	5.6
Total	\$ 124.5	\$ 205.2

<sup>(</sup>a) For additional information regarding our investments and fair value measurements, see notes 6 and 8 to our consolidated financial statements, respectively.

Losses on debt modification and extinguishment, net

The details of our losses on debt modification and extinguishment are as follows:

	Y	Year ended December			
	2015		2014		
		in milli	ons		
Liberty Global Group	\$	(388.0)	(174.4)		
LiLAC Group.			(11.8)		
Total	\$	(388.0)	(186.2)		

The loss during 2015 is attributable to (i) the payment of \$310.8 million of redemption premiums, (ii) the write-off of \$66.1 million of deferred financing costs, (iii) the write-off of \$10.3 million of net unamortized discount and (iv) the payment of \$0.8 million of third-party costs.

The loss during 2014 is attributable to (i) the payment of \$265.6 million of redemption premiums, (ii) the write-off of \$146.9 million of net unamortized premiums, (iii) the write-off of \$60.4 million of deferred financing costs and (iv) the payment of \$7.1 million of third-party costs.

For additional information concerning our losses on debt modification and extinguishment, net, see note 10 to our consolidated financial statements.

The details of our income tax benefit (expense) are as follows:

	Y	Year ended December 3			
	2015		2	2014	
		in millions			
Liberty Global Group	\$	(324.3)	\$	89.4	
LiLAC Group		(40.6)		(14.4)	
Total	\$	(364.9)	\$	75.0	

The income tax expense during 2015 differs from the expected income tax benefit of \$136.9 million (based on the U.K. statutory income tax rate of 20.0%) primarily due to the net negative impact of (i) an increase in valuation allowances, (ii) a reduction in net deferred tax assets in the U.K. due to enacted changes in tax law and (iii) certain permanent differences between the financial and tax accounting treatment of items associated with investments in subsidiaries and affiliates. The net negative impact of these items was partially offset by the net positive impact of (a) the tax effect of intercompany financing and (b) statutory tax rates in certain jurisdictions in which we operate that are different than the U.K. statutory income tax rate.

The income tax benefit during 2014 differs from the expected income tax benefit of \$221.7 million (based on the U.K. statutory income tax rate of 21.0%) primarily due to the net negative impact of (i) an increase in valuation allowances, (ii) certain permanent differences between the financial and tax accounting treatment of interest and other items and (iii) certain permanent differences between the financial and tax accounting treatment of items associated with investments in subsidiaries. The net negative impact of these items was partially offset by the net positive impact of (a) statutory tax rates in certain jurisdictions in which we operate that are different than the U.K. statutory income tax rate, (b) the tax effect of intercompany financing, (c) non-deductible or non-taxable foreign currency exchange results and (d) the recognition of previously unrecognized tax benefits.

For additional information concerning our income taxes, see note 11 to our consolidated financial statements.

# Loss from continuing operations

The details of our losses from continuing operations are as follows:

	Ŋ	Year ended December 31			
		2015		2014	
		in millions			
Liberty Global Group	\$	(1,101.2)	\$	(990.6)	
LiLAC Group		51.7		9.7	
Total	\$	(1,049.5)	\$	(980.9)	

During 2015 and 2014, we reported losses from continuing operations of \$1,049.5 million and \$980.9 million, respectively, including (i) operating income of \$2,349.2 million and \$2,228.2 million, respectively, (ii) net non-operating expense of \$3,033.8 million and \$3,284.1 million, respectively, and (iii) income tax benefit (expense) of (\$364.9 million) and \$75.0 million, respectively.

Gains or losses associated with (i) changes in the fair values of derivative instruments, (ii) movements in foreign currency exchange rates and (iii) the disposition of assets and changes in ownership are subject to a high degree of volatility and, as such, any gains from these sources do not represent a reliable source of income. In the absence of significant gains in the future from these sources or from other non-operating items, our ability to achieve earnings from continuing operations is largely dependent on our ability to increase our aggregate Adjusted OIBDA to a level that more than offsets the aggregate amount of our (a) share-based compensation expense, (b) depreciation and amortization, (c) impairment, restructuring and other operating items, (d) interest expense, (e) other non-operating expenses and (f) income tax expenses.

Due largely to the fact that we seek to maintain our debt at levels that provide for attractive equity returns, as discussed under *Liquidity and Capital Resources* — *Capitalization* below, we expect that we will continue to report significant levels of interest expense for the foreseeable future. For information concerning our expectations with respect to trends that may affect certain

aspects of our operating results in future periods, see the discussion under *Overview* above. For information concerning the reasons for changes in specific line items in our consolidated statements of operations, see the discussion under *Discussion and Analysis of our Reportable Segments* and *Discussion and Analysis of our Consolidated Operating Results* above.

## Discontinued operation

Our earnings from discontinued operation, net of taxes, of \$0.8 million during 2014 relate to the operations of the Chellomedia Disposal Group. In addition, we recognized an after-tax gain on the disposal of a discontinued operation of \$332.7 million related to the January 31, 2014 completion of the Chellomedia Transaction. For additional information, see note 5 to our consolidated financial statements.

Net earnings attributable to noncontrolling interests

The details of our net earnings attributable to noncontrolling interest are as follows:

	3	Year ended December 31,						
		2015 2014		2014	C	hange		
				in n		in millions		
Liberty Global Group	\$	(95.2)	\$	(49.9)	\$	(45.3)		
LiLAC Group		(7.8)		2.3		(10.1)		
Total	\$	(103.0)	\$	(47.6)	\$	(55.4)		

Net earnings or loss attributable to noncontrolling interests includes the noncontrolling interests' share of the results of our continuing and discontinued operations. The change in net earnings attributable to noncontrolling interests during 2015, as compared to 2014, is primarily attributable to the results of operations of Telenet.

### 2014 compared to 2013

#### Revenue

Our revenue by major category is set forth below:

	Year ende	ed I	Dece	mber 31,		Incr	Organic increase (decrease) (e)	
	2014		2013			\$	%	%
		in millions						
Subscription revenue (a):								
Video	\$ 6,538.	3	\$	5,720.7	9	817.6	14.3	0.6
Broadband internet	4,718.	5		3,535.0		1,183.5	33.5	13.5
Fixed-line telephony	3,259.	5		2,506.5		753.0	30.0	(0.4)
Cable subscription revenue	14,516.	3		11,762.2	_	2,754.1	23.4	4.3
Mobile subscription revenue (b)	1,085.	6		669.9		415.7	62.1	10.9
Total subscription revenue	15,601.	9		12,432.1	_	3,169.8	25.5	4.6
B2B revenue (c)	1,501.	3		980.5		520.8	53.1	7.0
Other revenue (b) (d)	1,145.	1		1,061.6		83.5	7.9	(11.4)
Total	\$ 18,248.	3	\$	14,474.2	5	3,774.1	26.1	3.6

<sup>(</sup>a) Subscription revenue includes amounts received from subscribers for ongoing services, excluding installation fees and late fees. Subscription revenue from subscribers who purchase bundled services at a discounted rate is generally allocated proportionally to each service based on the standalone price for each individual service. As a result, changes in the standalone pricing of our cable and mobile products or the composition of bundles can contribute to changes in our product revenue categories from period to period.

- (b) Mobile subscription revenue excludes mobile interconnect revenue of \$245.0 million and \$175.2 million during 2014 and 2013, respectively. Mobile interconnect revenue and revenue from mobile handset sales are included in other revenue.
- (c) B2B revenue includes revenue from business broadband internet, video, voice, mobile and data services offered to medium to large enterprises and, on a wholesale basis, to other operators. We also provide services to certain SOHO subscribers. SOHO subscribers pay a premium price to receive expanded service levels along with video, broadband internet, fixed-line telephony or mobile services that are the same or similar to the mass marketed products offered to our residential subscribers. Revenue from SOHO subscribers, which is included in cable subscription revenue, aggregated \$220.7 million and \$158.9 million during 2014 and 2013, respectively. On an organic basis, our total B2B revenue, including revenue from SOHO subscribers, increased 10.0% during 2014, as compared to 2013. A portion of the increase in our SOHO revenue is attributable to the conversion of our residential subscribers to SOHO subscribers.
- (d) Other revenue includes, among other items, interconnect, installation and channel carriage fee revenue.
- (e) As further described under *Results of Operations* above, our organic revenue growth rates for 2014, as compared to 2013, are impacted by the organic growth of Virgin Media. Excluding the impacts of the organic growth of Virgin Media, our organic growth rates (%) for such period would have been as follows:

#### Subscription revenue:

1	
Video	1.3
Broadband internet.	9.0
Fixed-line telephony	1.9
Cable subscription revenue	3.7
Mobile	9.5
Total subscription revenue	3.9
B2B revenue	4.2
Other revenue	(5.2)
Total revenue.	3.2
=	

*Total revenue*. Our consolidated revenue increased \$3,774.1 million during 2014, as compared to 2013. This increase includes \$3,096.0 million attributable to the impact of acquisitions. Excluding the effects of acquisitions and FX, our consolidated revenue increased \$523.9 million or 3.6%.

*Subscription revenue*. The details of the change in our consolidated subscription revenue for 2014, as compared to 2013, are as follows (in millions):

Increase in cable subscription revenue due to change in:

Average number of RGUs.	\$ 347.9
ARPU	155.4
Total increase in cable subscription revenue	503.3
Increase in mobile revenue	73.0
Total increase in subscription revenue	576.3
Impact of acquisitions	2,464.4
Impact of FX	129.1
Total	\$ 3,169.8

Excluding the effects of acquisitions and FX, our consolidated cable subscription revenue increased \$503.3 million or 4.3% during 2014, as compared to 2013. This increase in subscription revenue is attributable to the net effect of (i) an increase from broadband internet services of \$478.6 million or 13.5%, attributable to an increase in the average number of broadband internet RGUs and higher ARPU from broadband internet services, (ii) an increase from video services of \$34.9 million or 0.6%, attributable to the net effect of (a) higher ARPU from video services and (b) a decline in the average number of video RGUs, and (iii) a decrease from fixed-line telephony services of \$10.2 million or 0.4%, attributable to the net effect of (1) lower ARPU from fixed-line telephony services and (2) an increase in the average number of fixed-line telephony RGUs.

Excluding the effects of acquisitions and FX, our consolidated mobile subscription revenue increased \$73.0 million or 10.9% during 2014, as compared to 2013. This increase is primarily due to increases in the U.K. and, to a lesser extent, Belgium, Chile and Germany.

*B2B revenue*. Excluding the effects of acquisitions and FX, our consolidated B2B revenue increased \$68.7 million or 7.0% during 2014, as compared to 2013. This increase is primarily due to increases in the U.K. and, to a lesser extent, Switzerland and Belgium.

Other revenue. Excluding the effects of acquisitions and FX, our consolidated other revenue decreased \$121.1 million or 11.4% during 2014, as compared to 2013. This decrease is primarily attributable to declines in (i) fixed-line interconnect revenue, (ii) Virgin Media's non-cable subscriber base and (iii) installation revenue.

For additional information concerning the changes in our subscription, B2B and other revenue, see *Discussion and Analysis of our Reportable Segments — Revenue — 2014 compared to 2013* above.

## Supplemental revenue information

Our revenue by major category for the Liberty Global Group is set forth below:

	Year ended December 31,					Incr	Organic increase (decrease)				
	2014		2013		\$		\$ %		Ó	%	_
			in	millions							
Liberty Global Group:											
Subscription revenue:											
Video	\$ 6	,008.4	\$	5,159.3	\$	849.1		16.5	0.2		
Broadband internet	4	,338.4		3,150.1		1,188.3		37.7	14.0	)	
Fixed-line telephony	3	,071.1		2,288.4		782.7		34.2	(0.2	(:)	
Cable subscription revenue	13	,417.9		10,597.8		2,820.1		26.6	4.2	:	
Mobile subscription revenue (a)	1	,061.2		649.2		412.0		63.5	10.1		
Total subscription revenue	14	,479.1		11,247.0		3,232.1		28.7	4.5	;	
B2B revenue (b)	1	,497.5		978.1		519.4		53.1	6.8	;	
Other revenue.	1	,067.1		961.6		105.5		11.0	(11.2	(:)	
Total Liberty Global Group	\$ 17	,043.7	\$	13,186.7	\$	3,857.0		29.2	3.6	<u>-</u>	
										_	

<sup>(</sup>a) Mobile subscription revenue excludes mobile interconnect revenue of \$242.2 million and \$169.1 million during 2014 and 2013, respectively. Mobile interconnect revenue and revenue from mobile handset sales are included in other revenue.

<sup>(</sup>b) Revenue from SOHO subscribers, which is included in cable subscription revenue, aggregated \$203.4 million and \$153.1 million during 2014 and 2013, respectively. On an organic basis, the Liberty Global Group's total B2B revenue, including revenue from SOHO subscribers, increased 9.0% during 2014, as compared to 2013.

Our revenue by major category for the LiLAC Group is set forth below:

	Year ended	Organic increase (decrease)			
	2014	2013	\$	%	%
		in millions			
LiLAC Group:					
Subscription revenue:					
Video	\$ 529.9	\$ 561.4	\$ (31.5)	(5.6)	4.7
Broadband internet	380.1	384.9	(4.8)	(1.2)	9.8
Fixed-line telephony	188.4	218.1	(29.7)	(13.6)	(2.6)
Cable subscription revenue	1,098.4	1,164.4	(66.0)	(5.7)	5.0
Mobile subscription revenue (a)	24.4	20.7	3.7	17.9	37.1
Total subscription revenue	1,122.8	1,185.1	(62.3)	(5.3)	5.6
B2B revenue (b)	3.8	2.4	1.4	58.3	58.3
Other revenue.	78.0	101.3	(23.3)	(23.0)	(14.9)
Total LiLAC Group	\$ 1,204.6	\$ 1,288.8	\$ (84.2)	(6.5)	4.1

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### Operating expenses

Our operating expenses increased \$1,411.1 million during 2014, as compared to 2013. This increase includes \$1,393.8 million attributable to the impact of acquisitions. Our operating expenses include share-based compensation expense, which decreased \$4.5 million during 2014. For additional information, see the discussion under *Share-based compensation expense* below. Excluding the effects of acquisitions, FX and share-based compensation expense, our operating expenses decreased \$46.4 million or 0.9% during 2014, as compared to 2013. This decrease is primarily attributable to the net effect of (i) a decrease in network-related expenses, (ii) an increase in programming and copyright costs, (iii) a decrease in outsourced labor and professional fees, (iv) an increase in installation and other direct costs associated with B2B services in the U.K., (v) a decrease in mobile handset costs, (vi) a decrease in mobile access and interconnect costs, (vii) a decrease in bad debt and collections expenses, (viii) a decrease in certain direct costs associated with the U.K.'s non-cable subscriber base and (ix) a decrease in personnel costs. For additional information regarding the changes in our operating expenses, see *Discussion and Analysis of our Reportable Segments — Operating Expenses of our Reportable Segments* above.

#### SG&A expenses

Our SG&A expenses increased \$537.9 million during 2014, as compared to 2013. This increase includes \$412.2 million attributable to the impact of acquisitions. Our SG&A expenses include share-based compensation expense, which decreased \$39.0 million during 2014. For additional information, see the discussion under *Share-based compensation expense* below. Excluding the effects of acquisitions, FX and share-based compensation expense, our SG&A expenses increased \$157.5 million or 6.8% during 2014, as compared to 2013. This increase is primarily due to increases in (i) personnel costs, (ii) sales and marketing costs, (iii) information technology-related expenses and (iv) outsourced labor and professional fees, as increases in consulting costs associated with scale initiatives in the areas of information technology and finance were only partially offset by a decrease in integration costs. For additional information regarding the changes in our SG&A expenses, see *Discussion and Analysis of our Reportable Segments*— SG&A Expenses of our Reportable Segments above.

<sup>(</sup>a) Mobile subscription revenue excludes mobile interconnect revenue of \$2.8 million and \$6.1 million during 2014 and 2013, respectively. Mobile interconnect revenue and revenue from mobile handset sales are included in other revenue.

<sup>(</sup>b) Revenue from SOHO subscribers, which is included in cable subscription revenue, aggregated \$17.3 million and \$5.8 million during 2014 and 2013, respectively. On an organic basis, the LiLAC Group's total B2B revenue, including revenue from SOHO subscribers, increased 157.3% during 2014, as compared to 2013.

A summary of our aggregate share-based compensation expense is set forth below:

	Y	nber 31,		
	2014		2013	
	in r		n millions	
Liberty Global shares:				
Performance-based incentive awards (a)	\$	129.9	\$	58.6
Other share-based incentive awards		99.7		182.9
Total Liberty Global shares (b)		229.6		241.5
Telenet share-based incentive awards (c)		14.6		56.5
Other		13.0		4.5
Total	\$	257.2	\$	302.5
Included in:				
Operating expense:				
Liberty Global Group	\$	4.8	\$	10.8
LiLAC Group		2.8		1.3
Total operating expense.		7.6		12.1
SG&A expense:				
Liberty Global Group		240.8		283.5
LiLAC Group		8.8		5.1
Total SG&A expense.		249.6		288.6
Total	\$	257.2	\$	300.7
				·

<sup>(</sup>a) Includes share-based compensation expense related to (i) Liberty Global PSUs, (ii) the Challenge Performance Awards, which were issued on June 24, 2013, and (iii) for 2014, the PGUs.

For additional information concerning our share-based compensation, see note 13 to our consolidated financial statements.

<sup>(</sup>b) In connection with the Virgin Media Acquisition, we issued Virgin Media Replacement Awards to employees and former directors of Virgin Media in exchange for corresponding Virgin Media awards. Virgin Media recorded share-based compensation expense of \$55.8 million during 2014, including compensation expense related to the Virgin Media Replacement Awards and new awards that were granted after the Virgin Media Replacement Awards were issued. During 2013, Virgin Media recorded share-based compensation expense of \$134.3 million, primarily related to the Virgin Media Replacement Awards, including \$80.1 million that was charged to expense in recognition of the Virgin Media Replacement Awards that were fully vested on June 7, 2013 or for which vesting was accelerated pursuant to the terms of the Virgin Media Merger Agreement on or prior to December 31, 2013.

<sup>(</sup>c) During 2013, Telenet modified the terms of certain of its share-based incentive plans to provide for anti-dilution adjustments in connection with its shareholder returns. In connection with these anti-dilution adjustments, Telenet recognized share-based compensation expense of \$32.7 million and continues to recognize additional share-based compensation expense as the underlying options vest. In addition, during 2013, Telenet recognized expense of \$6.2 million related to the accelerated vesting of certain options.

The details of our depreciation and amortization expense are as follows:

	Year ended December 31,			Increase (decrease)			
	2014		2013		\$		%
			in	millions			
Liberty Global Group	\$	5,283.4	\$	3,934.0	\$	1,349.4	34.3
LiLAC Group.		216.7		342.4		(125.7)	(36.7)
Total	\$	5,500.1	\$	4,276.4	\$	1,223.7	28.6

Excluding the effects of FX, depreciation and amortization expense increased \$1,131.5 million or 26.5%. This increase is primarily due to the impact of the Virgin Media Acquisition and, to a lesser extent, the Ziggo Acquisition. In addition, a net increase resulted from the following factors: (i) an increase associated with property and equipment additions related to the installation of customer premises equipment, the expansion and upgrade of our networks and other capital initiatives, (ii) a decrease associated with certain assets becoming fully depreciated, primarily in the U.K., Belgium, Chile and Switzerland, and (iii) a decrease due to the impact of accelerated depreciation recorded during 2013, primarily in Chile where the acceleration was due to a change in our mobile strategy, as further discussed in note 9 to our consolidated financial statements.

## Release of litigation provision

During 2007, we recorded a litigation provision of \$146.0 million based on our assessment at the time of our loss exposure with respect to notices we received during 2002 and 2006 from former shareholders of Cignal Global Communications. On October 25, 2013, we received what we consider to be the effective resolution of these notices and, accordingly, we released the entire \$146.0 million provision during the third quarter of 2013.

Impairment, restructuring and other operating items, net

The details of our impairment, restructuring and other operating items, net, are as follows:

	Ye	ıber 31,		
		2014		2013
Liberty Global Group	\$	516.7	\$	210.2
LiLAC Group		20.1		87.3
Total	\$	536.8	\$	297.5

The total for 2014 includes (i) direct acquisition costs of \$331.3 million, including (a) \$222.0 million that was accrued during the fourth quarter in connection with the settlement of certain third-party appeals of the German competition authority's 2011 decision to approve our acquisition of KBW and (b) \$84.1 million associated with the Ziggo Acquisition, (ii) restructuring charges of \$166.9 million, including (1) an \$86.1 million charge to record the fair value of Telenet's obligations under certain DTT capacity contracts following Telenet's decision to discontinue the provision of DTT services on March 31, 2014 and (2) \$60.4 million of employee severance and termination costs related to certain reorganization activities, primarily in U.K./Ireland, the Netherlands, Germany, Chile and the European Operations Division's central operations, and (iii) an impairment charge of \$68.7 million that was recorded by Ziggo during the fourth quarter of 2014 to reduce the carrying amount of certain of Ziggo's internal-use software assets to zero following our determination that these assets would have no future service potential for our combined operations in the Netherlands.

The total for 2013 includes (i) restructuring charges of \$178.7 million, (ii) direct acquisition and disposition costs of \$64.7 million, primarily related to the Virgin Media Acquisition, (iii) an impairment charge of \$73.0 million to reduce the carrying amount of Telenet's spectrum rights following Telenet's determination that it would no longer be able to utilize its spectrum rights as a result of the conclusion of negotiations with network operators in Belgium and the absence of regulatory alternatives and (iv) a \$20.0 million credit resulting from cash received from the seller of OneLink upon the settlement of certain claims related to the OneLink Acquisition. The restructuring charges include (a) \$84.9 million recorded by VTR during the third and fourth quarters

of 2013 as a result of the decision to cease commercial use of VTR's mobile network, as further described in note 9 to our consolidated financial statements, and (b) \$77.9 million of employee severance and termination costs related to certain reorganization and integration activities, primarily in U.K./Ireland, Germany and Chile. The restructuring charges recorded by VTR include the fair value of (1) the remaining payments due under certain tower and real estate operating leases of \$71.5 million and (2) certain other required payments associated with VTR's mobile network.

For additional information regarding our restructuring charges, see note 14 to our consolidated financial statements.

#### Interest expense

The details of our interest expense are as follows:

	Y	Year ended December 31,			Increase						
		2014		2013		2013		2013		\$	%
			in	millions							
Liberty Global Group	\$	2,405.1	\$	2,226.9	\$	178.2	8.0				
LiLAC Group		140.4		81.5		58.9	72.3				
Inter-group eliminations		(0.8)		(21.5)		20.7	N.M.				
Total	\$	2,544.7	\$	2,286.9	\$	257.8	11.3				

# N.M. — Not Meaningful.

Excluding the effects of FX, interest expense increased \$538.2 million or 23.5%. This increase is primarily attributable to the net impact of (i) a higher average outstanding debt balance, largely due to (a) debt that was incurred in the first and second quarters of 2013 in connection with the Virgin Media Acquisition and (b) debt that was incurred in the fourth quarter of 2014 in connection with the Ziggo Acquisition, and (ii) a lower weighted average interest rate. The decrease in our weighted average interest rate is primarily related to (1) the completion of certain financing transactions that resulted in extended maturities and net decreases to certain of our interest rates and (2) decreases in certain of the base rates for our variable-rate indebtedness. For additional information regarding our outstanding indebtedness, see note 10 to our consolidated financial statements.

#### Interest and dividend income

The details of our interest and dividend income are as follows:

	Year ended December 31,			Increase (decrease)			
		2014	4 2013		\$		%
			in	millions			
Liberty Global Group	\$	29.0	\$	131.9	\$	(102.9)	(78.0)
LiLAC Group.		3.5		2.7		0.8	29.6
Inter-group eliminations		(0.8)		(21.5)		20.7	N.M.
Total	\$	31.7	\$	113.1	\$	(81.4)	(72.0)

### N.M. — Not Meaningful.

This decrease is primarily attributable to (i) a decrease in dividend income related to our investment in shares of Ziggo, as Ziggo did not declare any dividends following the January 2014 execution of the Ziggo Merger Protocol, and (ii) a slight decrease in interest income due to a lower average cash and cash equivalent and restricted cash balance.

The details of our realized and unrealized gains (losses) on derivative instruments, net, are as follows:

	Year ended I	December 31,
	2014	2013
	in mi	llions
Cross-currency and interest rate derivative contracts:		
Liberty Global Group	\$ 252.5	\$ (600.2)
LiLAC Group	41.1	13.7
Total cross-currency and interest rate derivative contracts (a)	293.6	(586.5)
Equity-related derivative instruments - Liberty Global Group:		
Ziggo Collar	(113.3)	(152.5)
ITV Collar	(77.4)	_
Sumitomo Collar	(46.0)	(206.4)
Other	0.4	(3.4)
Total equity-related derivative instruments (b)	(236.3)	(362.3)
Foreign currency forward contracts:		
Liberty Global Group	29.0	(73.9)
LiLAC Group	2.6	1.0
Total foreign currency forward contracts (c)	31.6	(72.9)
Other - Liberty Global Group	(0.1)	1.3
Total Liberty Global Group	45.1	(1,035.1)
Total LiLAC Group	43.7	14.7
Total	\$ 88.8	\$ (1,020.4)

<sup>(</sup>a) The gain during 2014 is primarily attributable to the net effect of (i) gains associated with decreases in the values of the euro, British pound sterling, Chilean peso and Swiss franc relative to the U.S. dollar, (ii) losses associated with decreases in market interest rates in the euro, British pound sterling, Swiss franc and Chilean peso markets and (iii) gains associated with decreases in the values of the Hungarian forint and Polish zloty relative to the euro. In addition, the gain during 2014 includes a net loss of \$120.9 million resulting from changes in our credit risk valuation adjustments. The loss during 2013 is primarily attributable to the net effect of (a) losses associated with increases in the values of the British pound sterling, euro and Swiss franc relative to the U.S. dollar, (b) gains associated with increases in market interest rates in the British pound sterling, euro and Swiss franc markets, (c) losses associated with increases in market interest rates in the U.S. dollar market, (d) gains associated with decreases in the values of the Chilean peso, Czech koruna, Swiss franc, Polish zloty and Hungarian forint relative to the euro, and (e) gains associated with a decrease in the value of the Chilean peso relative to the U.S. dollar. In addition, the loss during 2013 includes a net gain of \$15.3 million resulting from changes in our credit risk valuation adjustments.

For additional information concerning our derivative instruments, see notes 7 and 8 to our consolidated financial statements and *Quantitative and Qualitative Disclosures about Market Risk* below.

<sup>(</sup>b) For information concerning the factors that impact the valuations of our equity-related derivative instruments, see note 8 to our consolidated financial statements.

<sup>(</sup>c) Primarily includes activity with respect to the foreign currency forward contracts of LGE Financing, which contracts were settled during the fourth quarter of 2014, and activity during the first half of 2013 related to deal contingent forward contracts that were settled in connection with the Virgin Media Acquisition.

The details of our foreign currency transaction gains (losses), net, are as follows:

2014 2013           Interty Global Group:           U.S. dollar denominated debt issued by euro functional currency entities         \$ (481.5)         \$ 160.7           Intercompany payables and receivables denominated in a currency other than the entity's functional currency (a)         (290.0)         (261.7)           U.S. dollar denominated debt issued by a British pound sterling functional currency entity         (175.1)         249.3           Yen denominated debt issued by a U.S. dollar functional currency entity         109.2         192.3           Euro denominated debt issued by a U.S. dollar functional currency entity         72.2         (34.6)           British pound sterling denominated debt issued by a U.S. dollar functional currency entity         59.6         (37.3)           Cash and restricted cash denominated in a currency other than the entity's functional currency         32.2         94.9           Other         8.3         7.9           Total Liberty Global Group         (137.1)         −           LiLAC Group:         (137.1)         −           U.S. dollar denominated debt issued by a Chilean peso functional currency entity         (137.1)         −           Intercompany payables and receivables denominated in a currency other than the entity's functional currency of the			ar ended I		
Liberty Global Group:  U.S. dollar denominated debt issued by euro functional currency entities		2014			
U.S. dollar denominated debt issued by euro functional currency entities			in mi	llion	S
Intercompany payables and receivables denominated in a currency other than the entity's functional currency (a)	Liberty Global Group:				
functional currency (a)	U.S. dollar denominated debt issued by euro functional currency entities	\$	(481.5)	\$	160.7
Yen denominated debt issued by a U.S. dollar functional currency entity			(299.0)		(261.7)
Euro denominated debt issued by a U.S. dollar functional currency entity	U.S. dollar denominated debt issued by a British pound sterling functional currency entity		(175.1)		249.3
British pound sterling denominated debt issued by a U.S. dollar functional currency entity	Yen denominated debt issued by a U.S. dollar functional currency entity		109.2		192.3
Cash and restricted cash denominated in a currency other than the entity's functional currency	Euro denominated debt issued by a U.S. dollar functional currency entity		72.2		(34.6)
Other	British pound sterling denominated debt issued by a U.S. dollar functional currency entity		59.6		(37.3)
Total Liberty Global Group	Cash and restricted cash denominated in a currency other than the entity's functional currency		(32.3)		94.9
LiLAC Group:  U.S. dollar denominated debt issued by a Chilean peso functional currency entity	Other		8.3		7.9
U.S. dollar denominated debt issued by a Chilean peso functional currency entity	Total Liberty Global Group		(738.6)		371.5
Intercompany payables and receivables denominated in a currency other than the entity's functional currency (b)47.2(18.3)Other(8.0)(3.9)Total LiLAC Group(97.9)(22.2)	LiLAC Group:				
functional currency (b)       47.2       (18.3)         Other       (8.0)       (3.9)         Total LiLAC Group       (97.9)       (22.2)	U.S. dollar denominated debt issued by a Chilean peso functional currency entity		(137.1)		
Total LiLAC Group. (97.9) (22.2)	Intercompany payables and receivables denominated in a currency other than the entity's functional currency (b)		47.2		(18.3)
	Other		(8.0)		(3.9)
Total. \$ (836.5) \$ 349.3	Total LiLAC Group.		(97.9)		(22.2)
	Total	\$	(836.5)	\$	349.3

<sup>(</sup>a) Amounts primarily relate to (i) loans between certain of our non-operating and operating subsidiaries in Europe, which generally are denominated in the currency of the applicable operating subsidiary, and (ii) loans between certain of our non-operating subsidiaries in the U.S. and Europe.

For information regarding how we manage our exposure to foreign currency risk, see *Quantitative and Qualitative Disclosures* about Market Risk — Foreign Currency Risk below.

Realized and unrealized gains (losses) due to changes in fair values of certain investments, net

All of our investments that we account for using the fair value method are attributed to the Liberty Global Group. The details of our realized and unrealized gains (losses) due to changes in fair values of certain investments, net, are as follows:

	Year ended December 3					
		2014		2013		
		in mi	llions	1		
Investments (a):						
Ziggo	\$	224.0	\$	582.9		
Sumitomo		(99.8)		(6.8)		
ITV		54.9		_		
ITI Neovision		20.5		(35.9)		
Other, net		5.6		(16.1)		
Total	\$	205.2	\$	524.1		

<sup>(</sup>b) Amounts primarily relate to loans between certain of our subsidiaries in Europe and Chile.

(a) For additional information regarding our investments and fair value measurements, see notes 6 and 8 to our consolidated financial statements, respectively.

Losses on debt modification and extinguishment, net

The details of our losses on debt modification and extinguishment are as follows:

	Y	ear ended De	cember 31,
		2014	2013
		ons	
Liberty Global Group	\$	(174.4)	\$ (212.2)
LiLAC Group		(11.8)	
Total	\$	(186.2)	(212.2)

The loss during 2014 is attributable to (i) the payment of \$265.6 million of redemption premiums, (ii) the write-off of \$146.9 million of net unamortized premium, (iii) the write-off of \$60.4 million of deferred financing costs and (iv) the payment of \$7.1 million of third-party costs.

The loss during 2013 is attributable to (i) the payment of \$110.6 million of redemption premiums, (ii) the write-off of \$87.5 million of deferred financing costs and net unamortized discount, (iii) the payment of \$7.7 million of third-party costs and (iv) the payment of \$6.4 million of interest incurred between the respective dates that we and the trustee were legally discharged.

For additional information concerning our losses on debt modification and extinguishment, net, see note 10 to our consolidated financial statements.

Income tax benefit (expense)

The details of our income tax benefit (expense) are as follows:

	Ye	Year ended December					
		2014	2013				
		in mi	llions				
Liberty Global Group	\$	89.4	\$	(369.1)			
LiLAC Group		(14.4)		13.6			
Total	\$	75.0	\$	(355.5)			

The income tax benefit during 2014 differs from the expected income tax benefit of \$221.7 million (based on the U.K. statutory income tax rate of 21.0%) primarily due to the net negative impact of (i) an increase in valuation allowances, (ii) certain permanent differences between the financial and tax accounting treatment of interest and other items and (iii) certain permanent differences between the financial and tax accounting treatment of items associated with investments in subsidiaries. The net negative impact of these items was partially offset by the net positive impact of (a) statutory tax rates in certain jurisdictions in which we operate that are different than the U.K. statutory income tax rate, (b) the tax effect of intercompany financing, (c) non-deductible or non-taxable foreign currency exchange results and (d) the recognition of previously unrecognized tax benefits.

The income tax expense during 2013 differs from the expected income tax benefit of \$121.1 million (based on the U.K. statutory income tax rate of 23.0%) primarily due to the net negative impact of (i) a reduction in net deferred tax assets in the U.K. due to enacted changes in tax law, (ii) a loss of subsidiary tax attributes due to a deemed change in control related to the Virgin Media Acquisition, (iii) an increase in valuation allowances, (iv) non-deductible or non-taxable foreign currency exchange results and (v) certain permanent differences between the financial and tax accounting treatment of interest and other items, including \$51.1 million related to the reversal of a litigation provision in the third quarter, as further described in note 17 to our consolidated financial statements. The net negative impact of these items was partially offset by the net positive impact of (a) statutory tax rates

in certain jurisdictions in which we operate that are different than the U.K. statutory income tax rate and (b) the tax effect of intercompany financing.

For additional information concerning our income taxes, see note 11 to our consolidated financial statements.

## Loss from continuing operations

The details of our losses from continuing operations are as follows:

	Y	ear ended I	<b>Decen</b>	cember 31,		
		2014		2013		
Liberty Global Group	\$	(990.6)	\$	(829.0)		
LiLAC Group		9.7		(53.0)		
Total	\$	(980.9)	\$	(882.0)		

During 2014 and 2013, we reported losses from continuing operations of \$980.9 million and \$882.0 million, respectively, including (i) operating income of \$2,228.2 million and \$2,012.1 million, respectively, (ii) net non-operating expense of \$3,284.1 million and \$2,538.6 million, respectively, and (iii) income tax benefit (expense) of \$75.0 million and (\$355.5 million), respectively.

# Discontinued operation

Our earnings (loss) from discontinued operation, net of taxes, of \$0.8 million and (\$23.7 million) during 2014 and 2013, respectively, relates to the operations of the Chellomedia Disposal Group. In addition, we recognized an after-tax gain on the disposal of a discontinued operation of \$332.7 million related to the January 31, 2014 completion of the Chellomedia Transaction. For additional information, see note 5 to our consolidated financial statements.

Net earnings attributable to noncontrolling interests

The details of our net earnings attributable to noncontrolling interest are as follows:

	7	ear ended l				
	2014		2013		C	hange
			in millions			
Liberty Global Group	\$	(49.9)	\$	(72.1)	\$	22.2
LiLAC Group		2.3		13.9		(11.6)
Total	\$	(47.6)	\$	(58.2)	\$	10.6

The change in net earnings attributable to noncontrolling interests during 2014, as compared to 2013, is primarily attributable to the net effect of (i) a decline in the results of operations of Telenet and (ii) the impact of the VTR NCI Acquisition, which was completed during the first quarter of 2014.

## **Liquidity and Capital Resources**

### Sources and Uses of Cash

We are a holding company that is dependent on the capital resources of our subsidiaries to satisfy our liquidity requirements at the corporate level. Although our consolidated operating subsidiaries generate cash from operating activities, each of our significant operating subsidiaries is included within one of our seven subsidiary "borrowing groups." These borrowing groups include the respective restricted parent and subsidiary entities within Virgin Media, Ziggo Group Holding, Unitymedia, UPC Holding, Telenet, VTR Finance and Liberty Puerto Rico. As set forth in the table below, our borrowing groups accounted for a significant portion of our consolidated cash and cash equivalents at December 31, 2015. The terms of the instruments governing the indebtedness of these borrowing groups restrict our ability to access the liquidity of these subsidiaries. In addition, our ability to access the liquidity of these and other subsidiaries may be limited by tax and legal considerations, the presence of noncontrolling interests and other factors.

#### Cash and cash equivalents

The details of the U.S. dollar equivalent balances of our consolidated cash and cash equivalents at December 31, 2015 are set forth in the following table (in millions):

## Cash and cash equivalents held by:

Liberty Global and unrestricted subsidiaries:

Liberty Global (a)	\$ 24.6
Unrestricted subsidiaries:	
Liberty Global Group (b) (c)	185.0
LiLAC Group (d)	82.1
Total Liberty Global and unrestricted subsidiaries.	291.7
Borrowing groups (e):	
Telenet	301.3
VTR Finance	126.7
UPC Holding	151.1
Liberty Puerto Rico	65.7
Virgin Media (c)	29.5
Ziggo Group Holding	13.9
Unitymedia	2.2
Total borrowing groups	690.4
Total cash and cash equivalents	\$ 982.1

Total cash and cash equivalents.....\$

Liberty Global Group.....\$

LiLAC Group.....

707.6

274.5 982.1

<sup>(</sup>a) Represents the amount held by Liberty Global on a standalone basis, which is attributed to the Liberty Global Group.

<sup>(</sup>b) Represents the aggregate amount held by subsidiaries attributed to the Liberty Global Group that are outside of our borrowing groups.

<sup>(</sup>c) The Virgin Media borrowing group includes certain subsidiaries of Virgin Media, but excludes Virgin Media. The \$0.3 million of cash and cash equivalents held by Virgin Media is included in the amount shown for the Liberty Global Group's unrestricted subsidiaries.

<sup>(</sup>d) Represents the aggregate amount held by subsidiaries attributed to the LiLAC Group that are outside of our borrowing groups.

(e) Except as otherwise noted, represents the aggregate amounts held by the parent entity and restricted subsidiaries of our borrowing groups.

Liquidity of Liberty Global and its unrestricted subsidiaries

The \$24.6 million of cash and cash equivalents held by Liberty Global and, subject to certain tax and legal considerations, the \$291.7 million of aggregate cash and cash equivalents held by the unrestricted subsidiaries attributed to the Liberty Global Group and the LiLAC Group, represented available liquidity at the corporate level at December 31, 2015. Our remaining cash and cash equivalents of \$690.4 million at December 31, 2015 were held by our borrowing groups as set forth in the table above. As noted above, various factors may limit our ability to access the cash of our borrowing groups. For information regarding certain limitations imposed by our subsidiaries' debt instruments at December 31, 2015, see note 10 to our consolidated financial statements.

Our current sources of corporate liquidity include (i) cash and cash equivalents held by Liberty Global and, subject to certain tax and legal considerations, Liberty Global's unrestricted subsidiaries, and (ii) interest and dividend income received on our and, subject to certain tax and legal considerations, our unrestricted subsidiaries' cash and cash equivalents and investments. In addition, our parent entity's short-term liquidity is supplemented by interest payments that it receives on a note receivable from one of our unrestricted subsidiaries (outstanding principal of \$9.6 billion at December 31, 2015, all outstanding principal due in 2021).

From time to time, Liberty Global and its unrestricted subsidiaries may also receive (i) proceeds in the form of distributions or loan repayments from Liberty Global's borrowing groups or affiliates upon (a) the completion of recapitalizations, refinancings, asset sales or similar transactions by these entities or (b) the accumulation of excess cash from operations or other means, (ii) proceeds upon the disposition of investments and other assets of Liberty Global and its unrestricted subsidiaries and (iii) proceeds in connection with the incurrence of debt by Liberty Global or its unrestricted subsidiaries or the issuance of equity securities by Liberty Global, including equity securities issued to satisfy subsidiary obligations. No assurance can be given that any external funding would be available to Liberty Global or its unrestricted subsidiaries on favorable terms, or at all. For information regarding the disposition of the Chellomedia Disposal Group, see note 5 to our consolidated financial statements.

At December 31, 2015, our consolidated cash and cash equivalents balance includes \$919.6 million that is held by entities that are domiciled outside of the U.K. Based on our assessment of our ability to access the liquidity of our subsidiaries on a tax efficient basis and our expectations with respect to our corporate liquidity requirements, we do not anticipate that tax considerations will adversely impact our corporate liquidity over the next 12 months. Our ability to access the liquidity of our subsidiaries on a tax efficient basis is a consideration in assessing the extent of our share repurchase program.

Our corporate liquidity requirements include (i) corporate general and administrative expenses, (ii) interest payments on the Sumitomo Collar Loan and (iii) principal payments on the ITV Collar Loan, the Sumitomo Collar Loan and the Lionsgate Loan to the extent not settled through the delivery of the underlying shares. In addition, Liberty Global and its unrestricted subsidiaries may require cash in connection with (a) the repayment of third-party and intercompany debt, (b) the satisfaction of contingent liabilities, (c) acquisitions, (d) the repurchase of equity and debt securities, (e) other investment opportunities or (f) income tax payments. In addition, our parent entity uses available liquidity to make interest and principal payments on notes payable to certain of our unrestricted subsidiaries (aggregate outstanding principal of \$2,439.4 million at December 31, 2015 and no stated maturity). For information regarding our pending acquisition of CWC, see note 4 to our consolidated financial statements. For information regarding our commitments and contingencies, see note 17 to our consolidated financial statements.

As a U.K. incorporated company, we may only elect to repurchase shares or pay dividends to the extent of our "Distributable Reserves." Distributable Reserves, which are not linked to a GAAP reported amount, may be created through the earnings of the U.K. parent company and, amongst other methods, through a reduction in share premium approved by the English Companies Court. Based on the amounts set forth in our 2014 U.K. Companies Act Report dated April 27, 2015, which are our most recent "Relevant Accounts" for the purposes of determining our Distributable Reserves under U.K. law, our Distributable Reserves are \$27.9 billion. This amount does not reflect earnings, share repurchases or other activity that occurred in 2015, each of which impacts the amount of our Distributable Reserves.

During 2015, we purchased a total of 31,331,206 Class C Liberty Global Shares at a weighted average price of \$44.97 per share and 18,653,356 Class C Old Liberty Global Shares at a weighted average price of \$50.17 per share, for an aggregate purchase price of \$2,344.5 million, including direct acquisition costs and the effects of derivative instruments. At December 31, 2015, the remaining amount authorized for share repurchases was \$1,601.1 million. Subsequent to December 31, 2015, our board of directors increased this amount to \$4.0 billion.

### Liquidity of borrowing groups

The cash and cash equivalents of our borrowing groups are detailed in the table above. In addition to cash and cash equivalents, the primary sources of liquidity of our borrowing groups are cash provided by operations and borrowing availability under their respective debt instruments. For the details of the borrowing availability of such entities at December 31, 2015, see note 10 to our consolidated financial statements. The aforementioned sources of liquidity may be supplemented in certain cases by contributions and/or loans from Liberty Global and its unrestricted subsidiaries. The liquidity of our borrowing groups generally is used to fund property and equipment additions and debt service requirements. From time to time, our borrowing groups may also require liquidity in connection with (i) acquisitions and other investment opportunities, (ii) loans to Liberty Global, (iii) capital distributions to Liberty Global and other equity owners or (iv) the satisfaction of contingencies. No assurance can be given that any external funding would be available to our borrowing groups on favorable terms, or at all. For information regarding the liquidity requirements with respect to Telenet's acquisition of BASE, see note 20 to our consolidated financial statements. For information regarding our borrowing groups' contingencies, see note 17 to our consolidated financial statements.

For additional information regarding our consolidated cash flows, see the discussion under *Consolidated Statements of Cash Flows* below.

## Capitalization

We seek to maintain our debt at levels that provide for attractive equity returns without assuming undue risk. In this regard, we generally seek to cause our operating subsidiaries to maintain their debt at levels that result in a consolidated debt balance (excluding the Sumitomo Collar Loan, the ITV Collar Loan and the Lionsgate Loan and measured using subsidiary debt figures at swapped foreign currency exchange rates, consistent with the covenant calculation requirements of our subsidiary debt agreements) that is between four and five times our consolidated Adjusted OIBDA, although it should be noted that the timing of our acquisitions and financing transactions and the interplay of average and spot foreign currency rates may impact this ratio. The ratio of our December 31, 2015 consolidated debt to our annualized consolidated Adjusted OIBDA for the quarter ended December 31, 2015 was 4.9x. In addition, the ratio of our December 31, 2015 consolidated net debt (debt, as defined above, less cash and cash equivalents) to our annualized consolidated Adjusted OIBDA for the quarter ended December 31, 2015 was 4.8x.

When it is cost effective, we generally seek to match the denomination of the borrowings of our subsidiaries with the functional currency of the operations that are supporting the respective borrowings. As further discussed under *Quantitative and Qualitative Disclosures about Market Risk* below and in note 7 to our consolidated financial statements, we also use derivative instruments to mitigate foreign currency and interest rate risk associated with our debt instruments.

Our ability to service or refinance our debt and to maintain compliance with the leverage covenants in the credit agreements and indentures of our borrowing groups is dependent primarily on our ability to maintain or increase the Adjusted OIBDA of our operating subsidiaries and to achieve adequate returns on our property and equipment additions and acquisitions. In addition, our ability to obtain additional debt financing is limited by the leverage covenants contained in the various debt instruments of our borrowing groups. For example, if the Adjusted OIBDA of UPC Broadband Holding were to decline, we could be required to partially repay or limit our borrowings under the UPC Broadband Holding Bank Facility in order to maintain compliance with applicable covenants. No assurance can be given that we would have sufficient sources of liquidity, or that any external funding would be available on favorable terms, or at all, to fund any such required repayment. At December 31, 2015, each of our borrowing groups was in compliance with its debt covenants. In addition, we do not anticipate any instances of non-compliance with respect to the debt covenants of our borrowing groups that would have a material adverse impact on our liquidity during the next 12 months.

At December 31, 2015, our outstanding consolidated debt and capital lease obligations aggregated \$47.1 billion, including \$2,537.9 million that is classified as current in our consolidated balance sheet and \$42.0 billion that is not due until 2021 or thereafter. For additional information concerning our current debt maturities, see note 10 to our consolidated financial statements.

Notwithstanding our negative working capital position at December 31, 2015, we believe that we have sufficient resources to repay or refinance the current portion of our debt and capital lease obligations and to fund our foreseeable liquidity requirements during the next 12 months. However, as our maturing debt grows in later years, we anticipate that we will seek to refinance or otherwise extend our debt maturities. No assurance can be given that we will be able to complete these refinancing transactions or otherwise extend our debt maturities. In this regard, it is not possible to predict how political and economic conditions, sovereign debt concerns or any adverse regulatory developments could impact the credit and equity markets we access and, accordingly, our future liquidity and financial position. However, (i) the financial failure of any of our counterparties could (a) reduce amounts available under committed credit facilities and (b) adversely impact our ability to access cash deposited with any failed financial institution and (ii) tightening of the credit markets could adversely impact our ability to access debt financing on favorable terms,

or at all. In addition, any weakness in the equity markets could make it less attractive to use our shares to satisfy contingent or other obligations, and sustained or increased competition, particularly in combination with adverse economic or regulatory developments, could have an unfavorable impact on our cash flows and liquidity.

All of our consolidated debt and capital lease obligations have been borrowed or incurred by our subsidiaries at December 31, 2015.

For additional information concerning our debt and capital lease obligations, see note 10 to our consolidated financial statements.

# Consolidated Statements of Cash Flows

General. Our cash flows are subject to significant variations due to FX. See related discussion under Quantitative and Qualitative Disclosures about Market Risk — Foreign Currency Risk below. All of the cash flows discussed below are those of our continuing operations.

Consolidated Statements of Cash Flows — 2015 compared to 2014

Summary. Our consolidated statements of cash flows for 2015 and 2014 are summarized as follows:

	Year ended December 31,							
		2015	2014			Change		
			i	n millions				
Net cash provided by operating activities	\$	5,705.8	\$	5,612.8	\$	93.0		
Net cash used by investing activities		(3,829.4)		(2,799.6)		(1,029.8)		
Net cash used by financing activities		(2,037.8)		(4,260.1)		2,222.3		
Effect of exchange rate changes on cash		(15.0)		(81.9)		66.9		
Net decrease in cash and cash equivalents	\$	(176.4)	\$	(1,528.8)	\$	1,352.4		

Operating Activities. Our net cash flows from operating activities are as follows:

	Year ended December 31,				
	2015 2014			Change	
	in millions				
Net cash provided by operating activities:					
Liberty Global Group	\$ 5,399.3	\$	5,323.8	\$	75.5
LiLAC Group	306.5		289.0		17.5
Total	\$ 5,705.8	\$	5,612.8	\$	93.0
Liberty Global Group  LiLAC Group	\$ 306.5	\$	289.0	\$ <u>\$</u>	17.

The increase in total net cash provided by our operating activities is primarily attributable to the net effect of (i) an increase in the cash provided by our Adjusted OIBDA and related working capital items, largely due to the impact of the Ziggo Acquisition, (ii) a decrease in the reported net cash provided by operating activities due to FX, (iii) a decrease in cash provided due to higher cash payments for taxes, (iv) an increase in cash provided due to lower cash payments related to derivative instruments and (v) a decrease in cash provided due to higher cash payments for interest.

*Investing Activities.* Our net cash flows from investing activities are as follows:

Year ended I		
2015 2014		Change
_	in millions	_
\$ (3,429.0)	\$ (2,134.7)	\$ (1,294.3)
(490.6)	(232.2)	(258.4)
90.2	(432.7)	522.9
\$ (3,829.4)	\$ (2,799.6)	\$ (1,029.8)
	\$ (3,429.0) (490.6) 90.2	in millions  \$ (3,429.0) \$ (2,134.7) (490.6) (232.2)

The increase in total net cash used by our investing activities is primarily attributable to the net effect of (i) a decrease in cash of \$988.5 million associated with cash proceeds received during 2014 in connection with the Chellomedia Transaction, (ii) an increase in cash used of \$312.5 million associated with higher cash paid in connection with acquisitions and (iii) a decrease in cash used of \$184.9 million due to lower capital expenditures. Capital expenditures decreased from \$2,684.4 million during 2014 to \$2,499.5 million during 2015 due to the net effect of (a) an increase related to the Ziggo Acquisition, (b) a decrease due to FX and (c) a net decrease in the local currency capital expenditures of our subsidiaries, primarily due to an increase in capital-related vendor financing during 2015 as compared to 2014.

The capital expenditures that we report in our consolidated statements of cash flows do not include amounts that are financed under capital-related vendor financing or capital lease arrangements. Instead, these amounts are reflected as non-cash additions to our property and equipment when the underlying assets are delivered and as repayments of debt when the principal is repaid. In this discussion, we refer to (i) our capital expenditures as reported in our consolidated statements of cash flows, which exclude amounts financed under capital-related vendor financing or capital lease arrangements, and (ii) our total property and equipment additions, which include our capital expenditures on an accrual basis and amounts financed under capital-related vendor financing or capital lease arrangements. For further details regarding our property and equipment additions, see note 18 to our consolidated financial statements. A reconciliation of our consolidated property and equipment additions to our consolidated capital expenditures as reported in our consolidated statements of cash flows is set forth below:

	Year ended December 31,								
	2015				2014				
	Liberty Global Group		LiLAC Group	Total	Liberty Global Group	baľ LiL		Total	
		in millions							
Property and equipment additions	\$3,910.2	\$	227.1	\$4,137.3	\$3,653.0	\$	256.2	\$3,909.2	
Assets acquired under capital-related vendor financing arrangements	(1,481.5)			(1,481.5)	(975.3)			(975.3)	
Assets acquired under capital leases	(106.1)			(106.1)	(127.2)			(127.2)	
Changes in current liabilities related to capital expenditures	(50.3)		0.1	(50.2)	(89.2)		(33.1)	(122.3)	
Capital expenditures	\$2,272.3	\$	227.2	\$2,499.5	\$2,461.3	\$	223.1	\$2,684.4	

The property and equipment additions attributable to the Liberty Global Group are primarily related to the European Operations Division, which accounted for \$3,844.3 million and \$3,648.0 million of the Liberty Global Group's property and equipment additions during 2015 and 2014, respectively. The increase in the European Operations Division's property and equipment additions is due to the net effect of (i) a decrease due to FX, (ii) an increase due to the impact of the Ziggo Acquisition, (iii) an increase in expenditures for new build and upgrade projects to expand service, (iv) an increase in expenditures for support capital, such as information technology upgrades and general support systems, and (v) a decrease in expenditures for the purchase and installation of customer premises equipment. During 2015 and 2014, the European Operations Division's property and equipment additions represented 22.6% and 21.5% of its revenue, respectively.

Property and equipment additions attributable to the LiLAC Group decreased during 2015 as compared to 2014, primarily due to the net effect of (i) a decrease due to FX, (ii) an increase due to the impact of the Choice Acquisition, (iii) a decrease in expenditures for support capital, such as information technology upgrades and general support systems, (iv) a decrease in expenditures for new build and upgrade projects to expand service, and (v) a decrease in expenditures for the purchase and

installation of customer premises equipment. During 2015, approximately half of VTR's purchases of property and equipment were denominated in U.S. dollars. During 2015 and 2014, the LiLAC Group's property and equipment additions represented 18.7% and 21.3% of its revenue, respectively.

Excluding BASE and CWC, we expect the percentage of revenue represented by our aggregate 2016 consolidated property and equipment additions to range from 25% to 27%, including (i) 25% to 27% for the Liberty Global Group and (ii) 21% to 23% for the LiLAC Group. The increases in these percentages, as compared to the corresponding 2015 percentages, are primarily attributable to anticipated increases in expenditures associated with the Network Extensions. For additional information regarding the Network Extensions, see *Overview* above. The actual amount of our 2016 consolidated property and equipment additions and the 2016 property and equipment additions of the Liberty Global Group and the LiLAC Group may vary from expected amounts for a variety of reasons, including (a) changes in (1) the competitive or regulatory environment, (2) business plans, (3) our current or expected future operating results or (4) foreign currency exchange rates and (b) the availability of sufficient capital. Accordingly, no assurance can be given that our actual property and equipment additions will not vary materially from our expectations.

Financing Activities. Our net cash flows from financing activities are as follows:

	Year ended December 31,					
		2015		2014		Change
			i	in millions		
Net cash provided (used) by financing activities:						
Liberty Global Group	\$	(2,311.3)	\$	(4,574.8)	\$	2,263.5
LiLAC Group		363.7		(118.0)		481.7
Inter-group eliminations		(90.2)		432.7		(522.9)
Total	\$	(2,037.8)	\$	(4,260.1)	\$	2,222.3

The decrease in total net cash used by our financing activities is primarily attributable to the net effect of (i) a decrease in cash used of \$3,092.7 million related to higher net borrowings of debt, (ii) an increase in cash used of \$735.6 million due to higher repurchases of Liberty Global ordinary shares, (iii) a decrease in cash used of \$118.3 million related to a decrease in purchases of additional shares of our subsidiaries, (iv) an increase in cash used of \$80.2 million due to higher cash paid related to derivative instruments, (v) an increase in cash used of \$43.5 million due to higher payments for financing costs, debt premiums and exchange offer consideration and (vi) an increase in cash used of \$36.6 million associated with call option contracts on Liberty Global ordinary shares.

Consolidated Statements of Cash Flows — 2014 compared to 2013

Summary. Our consolidated statements of cash flows for 2014 and 2013 are summarized as follows:

	Year ended December 31,					
	2014 2013			2013		Change
		_	i	n millions		
Net cash provided by operating activities	\$	5,612.8	\$	3,921.0	\$	1,691.8
Net cash used by investing activities		(2,799.6)		(7,950.1)		5,150.5
Net cash provided (used) by financing activities		(4,260.1)		4,623.3		(8,883.4)
Effect of exchange rate changes on cash		(81.9)		85.4		(167.3)
Net increase (decrease) in cash and cash equivalents	\$	(1,528.8)	\$	679.6	\$	(2,208.4)

Operating Activities. Our net cash flows from operating activities are as follows:

	Year ended I			
	2014		2013	Change
		ir	n millions	
Net cash provided by operating activities:				
Liberty Global Group	\$ 5,323.8	\$	3,628.8	\$ 1,695.0
LiLAC Group	289.0		292.2	(3.2)
Total	\$ 5,612.8	\$	3,921.0	\$ 1,691.8

The increase in net cash provided by our operating activities is primarily attributable to the net effect of (i) an increase in the cash provided by our Adjusted OIBDA and related working capital items, largely due to the impact of the Virgin Media Acquisition and, to a lesser extent, the Ziggo Acquisition, (ii) a decrease in cash provided due to higher cash payments for interest, a significant portion of which is due to the impact of the Virgin Media Acquisition, (iii) an increase in the reported net cash provided by operating activities due to FX, (iv) a decrease in cash provided due to lower cash dividends received and (v) a decrease in cash provided due to higher cash payments related to derivative instruments.

Investing Activities. Our net cash flows from investing activities are as follows:

	Year ended December 31,					
		2014	2013			Change
			i	in millions		
Net cash used by investing activities:						
Liberty Global Group	\$	(2,134.7)	\$	(7,681.5)	\$	5,546.8
LiLAC Group		(232.2)		(263.9)		31.7
Inter-group eliminations		(432.7)		(4.7)		(428.0)
Total	\$	(2,799.6)	\$	(7,950.1)	\$	5,150.5

The decrease in net cash used by our investing activities is primarily attributable to the net effect of (i) a decrease in cash used of \$4,000.1 million associated with lower cash paid in connection with acquisitions, (ii) a decrease in cash used of \$988.5 million associated with cash proceeds received during 2014 in connection with the Chellomedia Transaction, (iii) a decrease in cash used of \$333.7 million associated with lower cash paid in connection with investments in and loans to affiliates and others and (iv) an increase in cash used of \$202.9 million due to higher capital expenditures. Capital expenditures increased from \$2,481.5 million during 2013 to \$2,684.4 million during 2014, primarily due to increases related to the Virgin Media Acquisition and, to a much lesser extent, the Ziggo Acquisition, that were only partially offset by a net decrease in the local currency capital expenditures of our other subsidiaries, due primarily to an increase in vendor financing during 2014 as compared to 2013.

A reconciliation of our consolidated property and equipment additions to our consolidated capital expenditures as reported in our consolidated statements of cash flows is set forth below:

			•	Year ended I	December 31	,		
			2014				2013	
	Liberty Global Group	Global LiLAC		Total	Liberty Global Group		LiLAC Group	Total
				in mi	llions			
Property and equipment additions	\$3,653.0	\$	256.2	\$3,909.2	\$2,907.3	\$	254.3	\$3,161.6
Assets acquired under capital-related vendor financing arrangements	(975.3)			(975.3)	(573.5)			(573.5)
Assets acquired under capital leases	(127.2)			(127.2)	(140.6)		(2.4)	(143.0)
Changes in current liabilities related to capital expenditures	(89.2)		(33.1)	(122.3)	26.2		10.2	36.4
Capital expenditures	\$2,461.3	\$	223.1	\$2,684.4	\$2,219.4	\$	262.1	\$2,481.5
		_		$\overline{}$		_		

The property and equipment additions attributable to the Liberty Global Group are primarily related to the European Operations Division, which accounted for \$3,648.0 million and \$2,901.0 million of the Liberty Global Group's property and equipment additions during 2014 and 2013, respectively. The increase in the European Operations Division's property and equipment additions is primarily due to the net effect of (i) an increase due to impact of the Virgin Media Acquisition and, to a lesser extent, the Ziggo Acquisition, (ii) a decrease in expenditures for the purchase and installation of customer premises equipment, (iii) an increase in expenditures for new build and upgrade projects to expand services and (iv) an increase in expenditures for support capital, such as information technology upgrades and general support systems. During 2014 and 2013, the European Operations Division's property and equipment additions represented 21.5% and 22.1% of its revenue, respectively.

Property and equipment additions attributable to the LiLAC Group increased during 2014, as compared to 2013, primarily due to the net effect of (i) a decrease due to FX, (ii) an increase in expenditures for new build and upgrade projects, (iii) an increase in expenditures for support capital, such as information technology upgrades and general support systems, and (iv) an increase in expenditures for the purchase and installation of customer premises equipment. During 2014 and 2013, the LiLAC Group's property and equipment additions represented 21.3% and 19.7% of its revenue, respectively.

Financing Activities. Our net cash flows from financing activities are as follows:

Year ended December 31,	
2014 2013 Chan	ge
in millions	
Net cash provided (used) by financing activities:	
	092.2)
LiLAC Group	219.2)
Inter-group eliminations	428.0
Total	883.4)

The change in net cash provided (used) by our financing activities is primarily attributable to the net effect of (i) a decrease in cash of \$3,652.5 million primarily due to the release of restricted cash in June 2013 in connection with the Virgin Media Acquisition, (ii) a decrease in cash of \$3,095.4 million related to lower net borrowings of debt, (iii) a decrease in cash of \$1,539.7 million due to the release of restricted cash during 2013 in connection with the Telenet Tender, (iv) a decrease in cash of \$745.5 million due to higher cash paid related to derivative instruments, (v) an increase in cash of \$528.9 million related to lower distributions by subsidiaries to noncontrolling interests, (vi) a decrease in cash of \$427.7 million related to higher repurchases of our shares and (vii) an increase in cash of \$200.6 million related to a decrease in purchases of additional shares of our subsidiaries.

# Free cash flow

We define free cash flow as net cash provided by our operating activities, plus (i) excess tax benefits related to the exercise of share-based incentive awards, (ii) cash payments for third-party costs directly associated with successful and unsuccessful acquisitions and dispositions and (iii) expenses financed by an intermediary, less (a) capital expenditures, as reported in our consolidated statements of cash flows, (b) principal payments on amounts financed by vendors and intermediaries and (c) principal payments on capital leases (exclusive of the portions of the network lease in Belgium and the duct leases in Germany that we assumed in connection with certain acquisitions), with each item excluding any cash provided or used by our discontinued operations. We believe that our presentation of free cash flow provides useful information to our investors because this measure can be used to gauge our ability to service debt and fund new investment opportunities. Free cash flow should not be understood to represent our ability to fund discretionary amounts, as we have various mandatory and contractual obligations, including debt repayments, which are not deducted to arrive at this amount. Investors should view free cash flows as a supplement to, and not a substitute for, GAAP measures of liquidity included in our consolidated statements of cash flows.

The following table provides the details of our free cash flow:

					Year e	nde	d Decemb	ber 31,							
		2	2015				2014			2013					
	Liberty Global Group		iLAC Froup	Total	Liberty Global Group	LiLAC Group in millions		Group		Group		Total	Liberty Global Group	 iLAC Group	Total
							00								
Net cash provided by operating activities of our continuing operations	\$ 5,399.3	\$	306.5	\$ 5,705.8	\$ 5,323.8	\$	289.0	\$ 5,612.8	\$3,628.8	\$ 292.2	\$3,921.0				
Excess tax benefits from share-based compensation (a)	23.0		3.7	26.7	6.9		0.1	7.0	40.0	1.0	41.0				
Cash payments (receipts) for direct acquisition and disposition costs	259.3		4.9	264.2	75.3		4.4	79.7	77.3	(16.3)	61.0				
Expenses financed by an intermediary (b)	294.2		_	294.2	27.5		_	27.5	6.1	_	6.1				
Capital expenditures	(2,272.3)		(227.2)	(2,499.5)	(2,461.3)		(223.1)	(2,684.4)	(2,219.4)	(262.1)	(2,481.5)				
Principal payments on amounts financed by vendors and intermediaries	(1,125.4)		_	(1,125.4)	(686.9)		_	(686.9)	(320.4)	_	(320.4)				
Principal payments on certain capital leases	(146.0)		(0.8)	(146.8)	(182.5)		(0.8)	(183.3)	(95.8)	_	(95.8)				
Free cash flow	\$ 2,432.1	\$	87.1	\$2,519.2	\$2,102.8	\$	69.6	\$2,172.4	\$1,116.6	\$ 14.8	\$1,131.4				

<sup>(</sup>a) Excess tax benefits from share-based compensation represent the excess of tax deductions over the related financial reporting share-based compensation expense. The hypothetical cash flows associated with these excess tax benefits are reported as an increase to cash flows from financing activities and a corresponding decrease to cash flows from operating activities in our consolidated statements of cash flows.

<sup>(</sup>b) For purposes of our consolidated statements of cash flows, expenses financed by an intermediary are treated as hypothetical operating cash outflows and hypothetical financing cash inflows when the expenses are incurred. When we pay the financing intermediary, we record financing cash outflows in our consolidated statements of cash flows. For purposes of our free cash flow definition, we add back the hypothetical operating cash outflow when these financed expenses are incurred and deduct the financing cash outflows when we pay the financing intermediary. The inclusion of this adjustment represents a change in our definition of free cash flow that we implemented effective January 1, 2015. The free cash flow reported for 2014 and 2013 has been revised to calculate free cash flow on a basis that is consistent with the new definition.

# **Contractual Commitments**

The following table sets forth the U.S. dollar equivalents of our commitments as of December 31, 2015:

		Payments due during:											
		2016		2017		2018		2019		2020	Th	ereafter	Total
							in	millions					
Debt (excluding interest)	\$	2,380.7	\$	520.1	\$	1,269.5	\$	370.0	\$	117.7	\$ 4	41,123.2	\$ 45,781.2
Capital leases (excluding interest)		155.7		114.6		89.2		74.1		73.0		816.2	1,322.8
Programming commitments		1,004.5		883.7		698.6		272.2		11.0		7.6	2,877.6
Network and connectivity commitments		647.0		241.7		130.9		90.7		58.2		916.3	2,084.8
		1,036.1		227.2		102.6		47.2		38.1		77.6	1,528.8
Operating leases		151.6		126.3		107.1		85.1		58.3		276.4	804.8
Other commitments		68.2		31.3		23.1		19.3		9.3		17.0	168.2
Total (a)	\$	5,443.8	\$	2,144.9	\$	2,421.0	\$	958.6	\$	365.6	\$ 4	43,234.3	\$ 54,568.2
Projected cash interest payments on debt and capital lease obligations (b):													
Liberty Global Group	\$	2,211.2	\$	2,083.4	\$	2,068.7	\$	2,059.8	\$	2,051.3	\$	6,518.0	\$ 16,992.4
LiLAC Group		147.9		147.3		147.3		147.1		145.7		417.8	1,153.1
Total	\$	2,359.1	\$	2,230.7	\$	2,216.0	\$	2,206.9	\$	2,197.0	\$	6,935.8	\$ 18,145.5
	_		_		_				_		_		

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- (a) The commitments included in this table do not reflect any liabilities that are included in our December 31, 2015 consolidated balance sheet other than debt and capital lease obligations. Our liability for uncertain tax positions in the various jurisdictions in which we operate (\$437.9 million at December 31, 2015) has been excluded from the table as the amount and timing of any related payments are not subject to reasonable estimation.
- (b) Amounts are based on interest rates, interest payment dates, commitment fees and contractual maturities in effect as of December 31, 2015. These amounts are presented for illustrative purposes only and will likely differ from the actual cash payments required in future periods. In addition, the amounts presented do not include the impact of our interest rate derivative contracts, deferred financing costs, original issue premiums or discounts.

For information concerning our debt and capital lease obligations, see note 10 to our consolidated financial statements. For information concerning our commitments, see note 17 to our consolidated financial statements.

In addition to the commitments set forth in the table above, we have significant commitments under (i) derivative instruments and (ii) defined benefit plans and similar agreements, pursuant to which we expect to make payments in future periods. For information regarding projected cash flows associated with these derivative instruments, see *Quantitative and Qualitative Disclosures about Market Risk — Projected Cash Flows Associated with Derivatives* below. For information regarding our derivative instruments, including the net cash paid or received in connection with these instruments during 2015, 2014 and 2013, see note 7 to our consolidated financial statements. For information concerning our defined benefit plans, see note 15 to our consolidated financial statements.

# Critical Accounting Policies, Judgments and Estimates

In connection with the preparation of our consolidated financial statements, we make estimates and assumptions that affect the reported amounts of assets and liabilities, revenue and expenses and related disclosure of contingent assets and liabilities. Critical accounting policies are defined as those policies that are reflective of significant judgments, estimates and uncertainties, which would potentially result in materially different results under different assumptions and conditions. We believe the following accounting policies are critical in the preparation of our consolidated financial statements because of the judgment necessary to account for these matters and the significant estimates involved, which are susceptible to change:

- Impairment of property and equipment and intangible assets (including goodwill);
- Costs associated with construction and installation activities;
- Useful lives of long-lived assets;
- · Fair value measurements; and
- Income tax accounting.

We have discussed the selection of the aforementioned critical accounting policies with the audit committee of our board of directors. For additional information concerning our significant accounting policies, see note 3 to our consolidated financial statements.

# Impairment of Property and Equipment and Intangible Assets

Carrying Value. The aggregate carrying value of our property and equipment and intangible assets (including goodwill) that were held for use comprised 83.2% of our total assets at December 31, 2015.

We review, when circumstances warrant, the carrying amounts of our property and equipment and our intangible assets (other than goodwill and other indefinite-lived intangible assets) to determine whether such carrying amounts continue to be recoverable. Such changes in circumstance may include (i) an expectation of a sale or disposal of a long-lived asset or asset group, (ii) adverse changes in market or competitive conditions, (iii) an adverse change in legal factors or business climate in the markets in which we operate and (iv) operating or cash flow losses. For purposes of impairment testing, long-lived assets are grouped at the lowest level for which cash flows are largely independent of other assets and liabilities, generally at or below the reporting unit level (see below). If the carrying amount of the asset or asset group is greater than the expected undiscounted cash flows to be generated by such asset or asset group, an impairment adjustment is recognized. Such adjustment is measured by the amount that the carrying value of such asset or asset group exceeds its fair value. We generally measure fair value by considering (a) sale prices for similar assets, (b) discounted estimated future cash flows using an appropriate discount rate and/or (c) estimated replacement cost. Assets to be disposed of are carried at the lower of their financial statement carrying amount or fair value less costs to sell.

We evaluate the goodwill, franchise rights and other indefinite-lived intangible assets for impairment at least annually on October 1 and whenever other facts and circumstances indicate that the carrying amounts of goodwill and other indefinite-lived intangible assets may not be recoverable. For impairment evaluations with respect to both goodwill and other indefinite-lived intangibles, we first make a qualitative assessment to determine if the goodwill or other indefinite-lived intangible may be impaired. In the case of goodwill, if it is more-likely-than-not that a reporting unit's fair value is less than its carrying value, we then compare the fair value of the reporting unit to its respective carrying amount. A reporting unit is an operating segment or one level below an operating segment (referred to as a "component"). In most cases, our operating segments are deemed to be a reporting unit either because the operating segment is comprised of only a single component, or the components below the operating segment are aggregated as they have similar economic characteristics. If the carrying value of a reporting unit were to exceed its fair value, we would then compare the implied fair value of the reporting unit's goodwill to its carrying amount, and any excess of the carrying amount over the fair value would be charged to operations as an impairment loss. With respect to franchise rights or other indefinite-lived intangible assets, if it is more-likely-than-not that the fair value over the fair value of the franchise right or other indefinite-lived intangible asset is also charged to operations as an impairment loss.

When required, considerable management judgment is necessary to estimate the fair value of reporting units and underlying long-lived and indefinite-lived assets. The equity of one of our reporting units, Telenet, is publicly traded in an active market. For this reporting unit, our fair value determination is based on quoted market prices. For other reporting units, we typically determine fair value using an income-based approach (discounted cash flows) based on assumptions in our long-range business plans and, in some cases, a combination of an income-based approach and a market-based approach. With respect to our discounted cash flow analysis used in the income-based approach, the timing and amount of future cash flows under these business plans require estimates, among other items, of subscriber growth and retention rates, rates charged per product, expected gross margins and Adjusted OIBDA margins and expected property and equipment additions. The development of these cash flows, and the discount rate applied to the cash flows, is subject to inherent uncertainties, and actual results could vary significantly from such estimates. Our determination of the discount rate is based on a weighted average cost of capital approach, which uses a market participant's cost of equity and after-tax cost of debt and reflects the risks inherent in the cash flows. Based on the results of our 2015 qualitative assessment of our reporting unit carrying values, we determined that it was more-likely-than-not that fair value exceeded carrying value for all of our reporting units.

During the three years ended December 31, 2015, the most significant impairment charges that we recorded with respect to our property and equipment and intangible assets were (i) the \$73.0 million impairment charge that Telenet recorded during the fourth quarter of 2013 to reduce the carrying value of the intangible assets related to certain of its spectrum rights and (ii) the \$68.7 million impairment charge that we recorded during the fourth quarter of 2014 to reduce the carrying amount of certain of Ziggo's internal-use software assets. For additional information, see note 9 to our consolidated financial statements.

If, among other factors, (i) our equity values were to decline significantly or (ii) the adverse impacts of economic, competitive, regulatory or other factors were to cause our results of operations or cash flows to be worse than anticipated, we could conclude in future periods that impairment charges are required in order to reduce the carrying values of our goodwill and, to a lesser extent, other long-lived assets. Any such impairment charges could be significant.

# Costs Associated with Construction and Installation Activities

We capitalize costs associated with the construction of new cable transmission and distribution facilities and the installation of new cable services. Installation activities that are capitalized include (i) the initial connection (or drop) from our cable system to a customer location, (ii) the replacement of a drop and (iii) the installation of equipment for additional services, such as digital cable, telephone or broadband internet service. The costs of other customer-facing activities, such as reconnecting customer locations where a drop already exists, disconnecting customer locations and repairing or maintaining drops, are expensed as incurred.

The nature and amount of labor and other costs to be capitalized with respect to construction and installation activities involves significant judgment. In addition to direct external and internal labor and materials, we also capitalize other costs directly attributable to our construction and installation activities, including dispatch costs, quality-control costs, vehicle-related costs and certain warehouse-related costs. The capitalization of these costs is based on time sheets, time studies, standard costs, call tracking systems and other verifiable means that directly link the costs incurred with the applicable capitalizable activity. We continuously monitor the appropriateness of our capitalization policies and update the policies when necessary to respond to changes in facts and circumstances, such as the development of new products and services, and changes in the manner that installations or construction activities are performed.

# Useful Lives of Long-Lived Assets

We depreciate our property and equipment on a straight-line basis over the estimated useful life of the assets. The determination of the useful lives of property and equipment requires significant management judgment, based on factors such as the estimated physical lives of the assets, technological changes, changes in anticipated use, legal and economic factors, rebuild and equipment swap-out plans, and other factors. Our intangible assets with finite lives primarily consist of customer relationships. Customer relationship intangible assets are amortized on a straight-line basis over the estimated weighted average life of the customer relationships. The determination of the estimated useful life of customer relationship intangible assets requires significant management judgment and is primarily based on historical and forecasted subscriber disconnect rates, adjusted when necessary for risk associated with demand, competition, technological changes and other economic factors. We regularly review whether changes to estimated useful lives are reflected prospectively. Depreciation and amortization expense of our continuing operations during 2015, 2014 and 2013 was \$5,825.8 million, \$5,500.1 million and \$4,276.4 million, respectively. A 10% increase in the aggregate amount of the depreciation and amortization expense of our continuing operations during 2015 would have resulted in a \$582.6 million or 24.8% decrease in our 2015 operating income.

### Fair Value Measurements

GAAP provides guidance with respect to the recurring and nonrecurring fair value measurements and for a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. Level 1 inputs are quoted market prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. Level 2 inputs are inputs other than quoted market prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for the asset or liability.

Recurring Valuations. We perform recurring fair value measurements with respect to our derivative instruments and fair value method investments, each of which are carried at fair value. We use (i) cash flow valuation models to determine the fair values of our interest rate and foreign currency derivative instruments and (ii) a binomial option pricing model to determine the fair values of our equity-related derivative instruments. We use quoted market prices when available and, when not available, we use a combination of an income approach (discounted cash flows) and a market approach (market multiples of similar businesses) to determine the fair value of our fair value method investments. For a detailed discussion of the inputs we use to determine the fair

value of our derivative instruments and fair value method investments, see note 8 to our consolidated financial statements. See also notes 6 and 7 to our consolidated financial statements for information concerning our fair value method investments and derivative instruments, respectively.

Changes in the fair values of our derivative instruments and fair value method investments have had, and we believe will continue to have, a significant and volatile impact on our results of operations. During 2015, 2014 and 2013, our continuing operations included net gains (losses) of \$971.7 million, \$294.0 million and (\$496.3 million), respectively, attributable to changes in the fair values of these items.

As further described in note 8 to our consolidated financial statements, actual amounts received or paid upon the settlement of our derivative instruments or disposal of our fair value method investments may differ materially from the recorded fair values at December 31, 2015.

For information concerning the sensitivity of the fair value of certain of our more significant derivative instruments to changes in market conditions, see *Quantitative and Qualitative Disclosures About Market Risk* — *Sensitivity Information* below.

Nonrecurring Valuations. Our nonrecurring valuations are primarily associated with (i) the application of acquisition accounting and (ii) impairment assessments, both of which require that we make fair value determinations as of the applicable valuation date. In making these determinations, we are required to make estimates and assumptions that affect the recorded amounts, including, but not limited to, expected future cash flows, market comparables and discount rates, remaining useful lives of long-lived assets, replacement or reproduction costs of property and equipment and the amounts to be recovered in future periods from acquired net operating losses and other deferred tax assets. To assist us in making these fair value determinations, we may engage third-party valuation specialists. Our estimates in this area impact, among other items, the amount of depreciation and amortization, impairment charges and income tax expense or benefit that we report. Our estimates of fair value are based upon assumptions we believe to be reasonable, but which are inherently uncertain. A significant portion of our long-lived assets were initially recorded through the application of acquisition accounting and all of our long-lived assets are subject to impairment assessments. For additional information, see notes 4, 8 and 9 to our consolidated financial statements.

# Income Tax Accounting

We are required to estimate the amount of tax payable or refundable for the current year and the deferred tax assets and liabilities for the future tax consequences attributable to differences between the financial statement carrying amounts and income tax basis of assets and liabilities and the expected benefits of utilizing net operating loss and tax credit carryforwards, using enacted tax rates in effect for each taxing jurisdiction in which we operate for the year in which those temporary differences are expected to be recovered or settled. This process requires our management to make assessments regarding the timing and probability of the ultimate tax impact of such items.

Net deferred tax assets are reduced by a valuation allowance if we believe it more-likely-than-not such net deferred tax assets will not be realized. Establishing or reducing a tax valuation allowance requires us to make assessments about the timing of future events, including the probability of expected future taxable income and available tax planning strategies. At December 31, 2015, the aggregate valuation allowance provided against deferred tax assets was \$6,395.6 million. The actual amount of deferred income tax benefits realized in future periods will likely differ from the net deferred tax assets reflected in our December 31, 2015 consolidated balance sheet due to, among other factors, possible future changes in income tax law or interpretations thereof in the jurisdictions in which we operate and differences between estimated and actual future taxable income. Any of such factors could have a material effect on our current and deferred tax positions as reported in our consolidated financial statements. A high degree of judgment is required to assess the impact of possible future outcomes on our current and deferred tax positions.

Tax laws in jurisdictions in which we have a presence are subject to varied interpretation, and many tax positions we take are subject to significant uncertainty regarding whether the position will be ultimately sustained after review by the relevant tax authority. We recognize the financial statement effects of a tax position when it is more-likely-than-not, based on technical merits, that the position will be sustained upon examination. The determination of whether the tax position meets the more-likely-than-not threshold requires a facts-based judgment using all information available. In a number of cases, we have concluded that the more-likely-than-not threshold is not met and, accordingly, the amount of tax benefit recognized in our consolidated financial statements is different than the amount taken or expected to be taken in our tax returns. As of December 31, 2015, the amount of unrecognized tax benefits for financial reporting purposes, but taken or expected to be taken on tax returns, was \$609.9 million, of which \$299.4 million would have a favorable impact on our effective income tax rate if ultimately recognized, after considering amounts that we would expect to be offset by valuation allowances.

We are required to continually assess our tax positions, and the results of tax examinations or changes in judgment can result in substantial changes to our unrecognized tax benefits.

We have taxable outside basis differences on certain investments in non-U.S. subsidiaries. We do not recognize the deferred tax liabilities associated with these outside basis differences when the difference is considered essentially permanent in duration. In order to be considered essentially permanent in duration, sufficient evidence must indicate that the foreign subsidiary has invested or will invest its undistributed earnings indefinitely, or that earnings will be remitted in a tax-free liquidation. If circumstances change and it becomes apparent that some or all of the undistributed earnings will be remitted on a taxable basis in the foreseeable future, a net deferred tax liability must be recorded for some or all of the outside basis difference. The assessment of whether these outside basis differences are considered permanent in nature requires significant judgment and is based on management's intentions to reinvest the earnings of a foreign subsidiary indefinitely in light of anticipated liquidity requirements and other relevant factors. At December 31, 2015, income and withholding taxes for which a net deferred tax liability might otherwise be required have not been provided on an estimated \$9.1 billion of cumulative temporary differences on non-U.S. entities, including cumulative translation adjustments. If our plans or intentions change in the future due to liquidity or other relevant considerations, we could decide that it would be prudent to repatriate significant funds or other assets from one or more of our subsidiaries, even though we would incur a tax liability in connection with any such repatriation. If our plans or intentions were to change in this manner, the recognition of all or a part of these outside basis differences could have an adverse impact on our consolidated net loss.

For additional information concerning our income taxes, see note 11 to our consolidated financial statements.

# Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risk in the normal course of our business operations due to our investments in various foreign countries and ongoing investing and financing activities. Market risk refers to the risk of loss arising from adverse changes in foreign currency exchange rates, interest rates and stock prices. The risk of loss can be assessed from the perspective of adverse changes in fair values, cash flows and future earnings. As further described below, we have established policies, procedures and processes governing our management of market risks and the use of derivative instruments to manage our exposure to such risks.

# Cash and Investments

We invest our cash in highly liquid instruments that meet high credit quality standards. We are exposed to exchange rate risk to the extent that the denominations of our cash and cash equivalent balances, revolving lines of credit and other short-term sources of liquidity do not correspond to the denominations of our and our subsidiaries' short-term liquidity requirements. In order to mitigate this risk, we actively manage the denominations of our cash balances in light of our and our subsidiaries' forecasted liquidity requirements. At December 31, 2015, \$627.8 million or 63.9%, \$210.4 million or 21.4%, \$92.2 million or 9.4% and \$76.7 million or 7.8% of our consolidated cash balances were denominated in euros, U.S. dollars, Chilean pesos and British pounds sterling, respectively.

We are also exposed to market price fluctuations related to our investments in ITV, Sumitomo and Lionsgate shares. At December 31, 2015, the aggregate fair value of these investments was \$1,624.1 million, \$471.1 million and \$162.0 million, respectively. All of our ITV and Sumitomo shares, and a portion of our Lionsgate shares, are held through the ITV Collar, the Sumitomo Collar and the Lionsgate Forward, respectively. For information concerning the terms of the ITV Collar and related ITV Collar Loan, the Sumitomo Collar and related Sumitomo Collar Loan and the Lionsgate Forward and related Lionsgate Loan, see note 7 to our consolidated financial statements. For those shares that are subject to the ITV Collar, the Sumitomo Collar and the Lionsgate Forward, our exposure to market risk is limited. For additional information concerning our investments in ITV, Sumitomo and Lionsgate shares, see note 6 to our consolidated financial statements.

# Foreign Currency Risk

We are exposed to foreign currency exchange rate risk with respect to our consolidated debt in situations where our debt is denominated in a currency other than the functional currency of the operations whose cash flows support our ability to repay or refinance such debt. Although we generally seek to match the denomination of our and our subsidiaries' borrowings with the functional currency of the operations that are supporting the respective borrowings, market conditions or other factors may cause us to enter into borrowing arrangements that are not denominated in the functional currency of the underlying operations (unmatched debt). In these cases, our policy is to provide for an economic hedge against foreign currency exchange rate movements by using derivative instruments to synthetically convert unmatched debt into the applicable underlying currency. At December 31, 2015, substantially all of our debt was either directly or synthetically matched to the applicable functional currencies of the underlying operations. For additional information concerning the terms of our derivative instruments, see note 7 to our consolidated financial statements.

In addition to the exposure that results from the mismatch of our borrowings and underlying functional currencies, we are exposed to foreign currency risk to the extent that we enter into transactions denominated in currencies other than our or our subsidiaries' respective functional currencies (non-functional currency risk), such as equipment purchases, programming contracts, notes payable and notes receivable (including intercompany amounts). Changes in exchange rates with respect to amounts recorded in our consolidated balance sheets related to these items will result in unrealized (based upon period-end exchange rates) or realized foreign currency transaction gains and losses upon settlement of the transactions. Moreover, to the extent that our revenue, costs and expenses are denominated in currencies other than our respective functional currencies, we will experience fluctuations in our revenue, costs and expenses solely as a result of changes in foreign currency exchange rates. In this regard, we currently expect that during 2016, (i) less than 1% of our revenue, (ii) approximately 3% to 5% of our aggregate operating and SG&A expenses (exclusive of share-based compensation expense) and (iii) approximately 7% to 9% of our property and equipment additions will be denominated in non-functional currencies, including amounts denominated in (a) U.S. dollars in Chile and Europe and (b) euros in the U.K., Poland, the Czech Republic, Romania, Switzerland and Hungary. Our expectations with respect to our non-functional currency transactions in 2016 may differ from actual results. Generally, we will consider hedging non-functional currency risks when the risks arise from agreements with third parties that involve the future payment or receipt of cash or other monetary items to the extent that we can reasonably predict the timing and amount of such payments or receipts and the payments or receipts are not otherwise hedged. In this regard, we have entered into foreign currency forward contracts to hedge certain of these risks. Certain non-functional currency risks related to our revenue, operating and SG&A expenses and property and equipment additions were not hedged as of December 31, 2015. For additional information concerning our foreign currency forward contracts, see note 7 to our consolidated financial statements.

We also are exposed to unfavorable and potentially volatile fluctuations of the U.S. dollar (our reporting currency) against the currencies of our operating subsidiaries when their respective financial statements are translated into U.S. dollars for inclusion in our consolidated financial statements. Cumulative translation adjustments are recorded in accumulated other comprehensive earnings (loss) as a separate component of equity. Any increase (decrease) in the value of the U.S. dollar against any foreign currency that is the functional currency of one of our operating subsidiaries will cause us to experience unrealized foreign currency translation losses (gains) with respect to amounts already invested in such foreign currencies. Accordingly, we may experience a negative impact on our comprehensive earnings (loss) and equity with respect to our holdings solely as a result of FX. Our primary exposure to FX risk during the three months ended December 31, 2015 was to the euro and British pound sterling as 43.8% and 37.0% of our U.S. dollar revenue during the period was derived from subsidiaries whose functional currencies are the euro and British pound sterling, respectively. In addition, our reported operating results are impacted by changes in the exchange rates for the Swiss franc, the Chilean peso and other local currencies in Europe. We generally do not hedge against the risk that we may incur non-cash losses upon the translation of the financial statements of our subsidiaries and affiliates into U.S. dollars. For information regarding certain currency instability risks with respect to the euro, see *Management's Discussion and Analysis of Financial Condition and Results of Operations — Overview* above.

The relationship between (i) the euro, the British pound sterling, the Swiss franc, the Hungarian forint, the Polish zloty, the Czech koruna, the Romanian lei and the Chilean peso and (ii) the U.S. dollar, which is our reporting currency, is shown below, per one U.S. dollar:

	As of Dec	ember 31,
	2015	2014
Spot rates:		
Euro	0.9203	0.8264
British pound sterling	0.6787	0.6418
Swiss franc	0.9997	0.9939
Hungarian forint	290.85	261.44
Polish zloty	3.9286	3.5397
Czech koruna	24.867	22.914
Romanian lei	4.1604	3.7059
Chilean peso	708.60	606.90

	Year ended December 31,							
	2015	2014	2013					
Average rates:								
Euro	0.9009	0.7537	0.7530					
British pound sterling	0.6545	0.6074	0.6396					
Swiss franc	0.9630	0.9152	0.9268					
Hungarian forint	279.39	232.73	223.58					
Polish zloty	3.7717	3.1553	3.1601					
Czech koruna	24.593	20.758	19.559					
Romanian lei	4.0079	3.3494	3.3273					
Chilean peso	654.71	570.76	495.45					

# Inflation and Foreign Investment Risk

We are subject to inflationary pressures with respect to labor, programming and other costs. While we attempt to increase our revenue to offset increases in costs, there is no assurance that we will be able to do so. Therefore, costs could rise faster than associated revenue, thereby resulting in a negative impact on our operating results, cash flows and liquidity. The economic environment in the respective countries in which we operate is a function of government, economic, fiscal and monetary policies and various other factors beyond our control that could lead to inflation. We are unable to predict the extent that price levels might be impacted in future periods by the current state of the economies in the countries in which we operate.

# Interest Rate Risks

We are exposed to changes in interest rates primarily as a result of our borrowing and investment activities, which include fixed-rate and variable-rate investments and borrowings by our borrowing groups. Our primary exposure to variable-rate debt is through the EURIBOR-indexed and LIBOR-indexed debt of UPC Broadband Holding and Ziggo, the LIBOR-indexed debt of Virgin Media, the EURIBOR-indexed debt of Telenet and Unitymedia and the variable-rate debt of certain of our other subsidiaries.

In general, we seek to enter into derivative instruments to protect against increases in the interest rates on our variable-rate debt. Accordingly, we have entered into various derivative transactions to reduce exposure to increases in interest rates. We use interest rate derivative contracts to exchange, at specified intervals, the difference between fixed and variable interest rates calculated by reference to an agreed-upon notional principal amount. We also use interest rate cap and collar agreements that lock in a maximum interest rate if variable rates rise, but also allow our company to benefit, to a limited extent in the case of collars, from declines in market rates. At December 31, 2015, we effectively paid a fixed interest rate on 97% of our total debt. The final maturity dates of our various portfolios of interest rate derivative instruments generally fall short of the respective maturities of the underlying variable-rate debt. In this regard, we use judgment to determine the appropriate maturity dates of our portfolios of interest rate derivative instruments, taking into account the relative costs and benefits of different maturity profiles in light of current and expected future market conditions, liquidity issues and other factors. For additional information concerning the terms of these interest rate derivative instruments, see note 7 to our consolidated financial statements.

Weighted Average Variable Interest Rate. At December 31, 2015, our variable-rate indebtedness aggregated \$14.5 billion, and the weighted average interest rate (including margin) on such variable-rate indebtedness was approximately 3.7%, excluding the effects of interest rate derivative contracts, financing costs, discounts or commitment fees, all of which affect our overall cost of borrowing. Assuming no change in the amount outstanding, and without giving effect to any interest rate derivative contracts, financing costs, discounts or commitment fees, a hypothetical 50 basis point (0.50%) increase (decrease) in our weighted average variable interest rate would increase (decrease) our annual consolidated interest expense and cash outflows by \$72.5 million. As discussed above and in note 7 to our consolidated financial statements, we use interest rate derivative contracts to manage our exposure to increases in variable interest rates. In this regard, increases in the fair value of these contracts generally would be expected to offset most of the economic impact of increases in the variable interest rates applicable to our indebtedness to the extent and during the period that principal amounts are matched with interest rate derivative contracts.

# Counterparty Credit Risk

We are exposed to the risk that the counterparties to the derivative instruments, undrawn debt facilities and cash investments of our subsidiary borrowing groups will default on their obligations to us. We manage these credit risks through the evaluation and monitoring of the creditworthiness of, and concentration of risk with, the respective counterparties. In this regard, credit risk associated with our derivative instruments and undrawn debt facilities is spread across a relatively broad counterparty base of banks and financial institutions. Collateral is generally not posted by either party under the derivative instruments of our subsidiary borrowing groups. Most of our cash currently is invested in either (i) AAA credit rated money market funds, including funds that invest in government obligations, or (ii) overnight deposits with banks having a minimum credit rating of A by Standard & Poor's or an equivalent rating by Moody's Investor Service. To date, neither the access to nor the value of our cash and cash equivalent balances have been adversely impacted by liquidity problems of financial institutions.

At December 31, 2015, our exposure to counterparty credit risk included (i) derivative assets with an aggregate fair value of \$2,025.2 million, (ii) cash and cash equivalent and restricted cash balances of \$1,110.0 million and (iii) aggregate undrawn debt facilities of \$3,910.6 million.

Each of our subsidiary borrowing groups have entered into derivative instruments under master agreements with each counterparty that contain master netting arrangements that are applicable in the event of early termination by either party to such derivative instrument. The master netting arrangements under each of these master agreements are limited to the derivative instruments governed by the relevant master agreement within each individual borrowing group and are independent of similar arrangements of our other subsidiary borrowing groups.

Under our derivative contracts, it is generally only the non-defaulting party that has a contractual option to exercise early termination rights upon the default of the other counterparty and to set off other liabilities against sums due upon such termination. However, in an insolvency of a derivative counterparty, under the laws of certain jurisdictions, the defaulting counterparty or its insolvency representatives may be able to compel the termination of one or more derivative contracts and trigger early termination payment liabilities payable by us, reflecting any mark-to-market value of the contracts for the counterparty. Alternatively, or in addition, the insolvency laws of certain jurisdictions may require the mandatory set off of amounts due under such derivative contracts against present and future liabilities owed to us under other contracts between us and the relevant counterparty.

Accordingly, it is possible that we may be subject to obligations to make payments, or may have present or future liabilities owed to us partially or fully discharged by set off as a result of such obligations, in the event of the insolvency of a derivative counterparty, even though it is the counterparty that is in default and not us. To the extent that we are required to make such payments, our ability to do so will depend on our liquidity and capital resources at the time. In an insolvency of a defaulting counterparty, we will be an unsecured creditor in respect of any amount owed to us by the defaulting counterparty, except to the extent of the value of any collateral we have obtained from that counterparty.

In addition, where a counterparty is in financial difficulty, under the laws of certain jurisdictions, the relevant regulators may be able to (i) compel the termination of one or more derivative instruments, determine the settlement amount and/or compel, without any payment, the partial or full discharge of liabilities arising from such early termination that are payable by the relevant counterparty or (ii) transfer the derivative instruments to an alternative counterparty.

While we currently have no specific concerns about the creditworthiness of any counterparty for which we have material credit risk exposures, the current economic conditions and uncertainties in global financial markets have increased the credit risk of our counterparties and we cannot rule out the possibility that one or more of our counterparties could fail or otherwise be unable to meet its obligations to us. Any such instance could have an adverse effect on our cash flows, results of operations, financial condition and/or liquidity.

Although we actively monitor the creditworthiness of our key vendors, the financial failure of a key vendor could disrupt our operations and have an adverse impact on our revenue and cash flows.

# Sensitivity Information

Information concerning the sensitivity of the fair value of certain of our more significant derivative instruments to changes in market conditions is set forth below. The potential changes in fair value set forth below do not include any amounts associated with the remeasurement of the derivative asset or liability into the applicable functional currency. For additional information, see notes 7 and 8 to our consolidated financial statements.

Virgin Media Cross-currency and Interest Rate Derivative Contracts

Holding all other factors constant, at December 31, 2015:

- (i) an instantaneous increase (decrease) of 10% in the value of the British pound sterling relative to the U.S. dollar would have decreased (increased) the aggregate fair value of the Virgin Media cross-currency and interest rate derivative contracts by approximately £464 million (\$684 million);
- (ii) an instantaneous increase (decrease) in the relevant base rate of 50 basis points (0.50%) would have increased (decreased) the aggregate fair value of the Virgin Media cross-currency and interest rate derivative contracts by approximately £56 million (\$83 million); and
- (iii) an instantaneous increase (decrease) of 10% in the value of the euro relative to the U.S. dollar would have decreased (increased) the aggregate fair value of the Virgin Media cross-currency contracts by approximately £33 million (\$49 million).

UPC Broadband Holding Cross-currency and Interest Rate Derivative Contracts

Holding all other factors constant, at December 31, 2015:

- (i) an instantaneous increase (decrease) of 10% in the value of the Swiss franc, Polish zloty, Czech koruna and Hungarian forint relative to the euro would have decreased (increased) the aggregate fair value of the UPC Broadband Holding cross-currency and interest rate derivative contracts by approximately €457 million (\$497 million);
- (ii) an instantaneous increase (decrease) of 10% in the value of the euro relative to the U.S. dollar would have decreased (increased) the aggregate fair value of the UPC Broadband Holding cross-currency and interest rate derivative contracts by approximately €275 million (\$299 million);
- (iii) an instantaneous increase (decrease) of 10% in the value of the Swiss franc and Romanian lei relative to the U.S. dollar would have decreased (increased) the aggregate fair value of the UPC Broadband Holding cross-currency and interest rate derivative contracts by approximately €120 million (\$130 million); and

(iv) an instantaneous increase in the relevant base rate of 50 basis points (0.50%) would have increased the aggregate fair value of the UPC Broadband Holding cross-currency and interest rate derivative contracts by approximately €54 million (\$59 million) and, conversely, a decrease of 50 basis points would have decreased the aggregate fair value by approximately €60 million (\$65 million).

Ziggo Group Holding Cross-currency and Interest Rate Derivative Contracts

Holding all other factors constant, at December 31, 2015:

- (i) an instantaneous increase (decrease) of 10% in the value of the euro relative to the U.S. dollar would have decreased (increased) the aggregate fair value of the Ziggo cross-currency and interest rate derivative contracts by approximately €309 million (\$336 million); and
- (ii) an instantaneous increase (decrease) in the relevant base rate of 50 basis points (0.50%) would have increased (decreased) the aggregate fair value of the Ziggo cross-currency and interest rate derivative contracts by approximately €143 million (\$155 million).

Unitymedia Cross-currency Derivative Contracts

Holding all other factors constant, at December 31, 2015, an instantaneous increase (decrease) of 10% in the value of the euro relative to the U.S. dollar would have decreased (increased) the aggregate value of the Unitymedia cross-currency derivative contracts by approximately €242 million (\$263 million).

Telenet Interest Rate Caps, Collars and Swaps

Holding all other factors constant, at December 31, 2015, an instantaneous increase (decrease) in the relevant base rate of 50 basis points (0.50%) would have increased (decreased) the aggregate fair value of the Telenet interest rate cap, collar and swap contracts by approximately €62 million (\$67 million).

VTR Cross-currency Derivative Contracts

Holding all other factors constant, at December 31, 2015, an instantaneous increase (decrease) of 10% in the value of the Chilean peso relative to the U.S. dollar would have decreased (increased) the aggregate fair value of the VTR cross-currency derivative contracts by approximately CLP 108.5 billion (\$153 million).

ITV Collar

Holding all other factors constant, at December 31, 2015, an instantaneous increase (decrease) of 10% in the per share market price of ITV's ordinary shares would have decreased (increased) the fair value of the ITV Collar by approximately £107 million (\$158 million).

Sumitomo Collar

Holding all other factors constant, at December 31, 2015, an instantaneous increase (decrease) of 10% in the per share market price of Sumitomo's common stock would have decreased (increased) the fair value of the Sumitomo Collar by approximately ¥5.4 billion (\$45 million).

# Projected Cash Flows Associated with Derivative Instruments

The following table provides information regarding the projected cash flows of our continuing operations associated with our derivative instruments. The U.S. dollar equivalents presented below are based on interest rates and exchange rates that were in effect as of December 31, 2015. These amounts are presented for illustrative purposes only and will likely differ from the actual cash payments required in future periods. For additional information regarding our derivative instruments, including our counterparty credit risk, see note 7 to our consolidated financial statements. For information concerning the counterparty credit risk associated with our derivative instruments, see the discussion under *Counterparty Credit Risk* above.

		Pa	ym	ents (recei	ipt	s) due durin	ıg:				
	2016	2017		2018	2019		2020		T	hereafter	Total
	 	 			i	n millions					
Projected derivative cash payments (receipts), net:											
Liberty Global Group:											
Interest-related (a)	\$ 21.4	\$ 73.3	\$	44.1	\$	43.5	\$	30.4	\$	50.5	\$ 263.2
Principal-related (b)	27.1	197.9		19.3		(80.9)		(106.9)		(1,378.2)	(1,321.7)
Other (c)	(85.0)	(78.9)		(36.2)		(0.6)		(0.6)		(0.6)	(201.9)
Total Liberty Global Group	(36.5)	192.3		27.2		(38.0)		(77.1)		(1,328.3)	(1,260.4)
LiLAC Group:											
Interest-related (a)	(10.9)	3.2		3.1		1.0		0.3		(2.7)	(6.0)
Principal-related (b)										(57.4)	(57.4)
Other (c)	(2.0)										(2.0)
Total LiLAC Group	(12.9)	3.2		3.1		1.0		0.3		(60.1)	(65.4)
Total	\$ (49.4)	\$ 195.5	\$	30.3	\$	(37.0)	\$	(76.8)	\$	(1,388.4)	\$ (1,325.8)

<sup>(</sup>a) Includes (i) the cash flows of our interest rate cap, collar and swap contracts and (ii) the interest-related cash flows of our cross-currency and interest rate swap contracts.

<sup>(</sup>b) Includes the principal-related cash flows of our cross-currency contracts.

<sup>(</sup>c) Includes amounts related to our equity-related derivative instruments and foreign currency forward contracts. We may elect to use cash or the collective value of the related shares and equity-related derivative instrument to settle the ITV Collar Loan, the Sumitomo Collar Loan and the Lionsgate Loan.

# Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The consolidated financial statements of Liberty Global are filed under this Item, beginning on page II-88. Financial statement schedules are filed under Item 15 of this Annual Report on Form 10-K.

# Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

# Item 9A. CONTROLS AND PROCEDURES

# Evaluation of disclosure controls and procedures

In accordance with Exchange Act Rule 13a-15, we carried out an evaluation, under the supervision and with the participation of management, including our chief executive officer, principal accounting officer, and principal financial officer (the Executives), of the effectiveness of our disclosure controls and procedures as of December 31, 2015. In designing and evaluating the disclosure controls and procedures, the Executives recognize that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is necessarily required to apply judgment in evaluating the cost-benefit relationship of possible controls and objectives. Based on that evaluation, the Executives concluded that our disclosure controls and procedures are effective as of December 31, 2015, in timely making known to them material information relating to us and our consolidated subsidiaries required to be disclosed in our reports filed or submitted under the Securities Exchange Act of 1934.

# Internal control over financial reporting

(a) Management's Annual Report on Internal Control over Financial Reporting

Management's annual report on internal control over financial reporting is included herein on page II-85.

(b) Attestation Report of the Independent Registered Public Accounting Firm

The attestation report of KPMG LLP is included herein on page II-86.

(c) Changes in Internal Control over Financial Reporting

There have been no changes in our internal controls over financial reporting identified in connection with the evaluation described above that occurred during the fourth fiscal quarter covered by this Annual Report on Form 10-K that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

# Item 9B. OTHER INFORMATION

Not applicable.

# Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) of the Securities Exchange Act of 1934. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management assessed the effectiveness of internal control over financial reporting as of December 31, 2015, using the criteria in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, our management believes that our internal control over financial reporting was effective as of December 31, 2015. The effectiveness of our internal control over financial reporting has been audited by KPMG LLP, an independent registered public accounting firm, as stated in their report included herein. Our evaluation of internal control over financial reporting did not include the internal control of the following entities that we acquired in 2015:

	our co financial st	ets included in nsolidated tatements as of per 31, 2015	in our o financial the y	enue included consolidated statements for ear ended ber 31, 2015
		in mil	llions	
Cable Acquisition Company Inc., dba Choice Cable TV	\$	357.6	\$	52.1
Tullamore Beta Limited, the parent of TV3		116.4		4.4
	\$	474.0	\$	56.5

# Report of Independent Registered Public Accounting Firm

The Board of Directors Liberty Global plc:

We have audited Liberty Global plc and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control* — *Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control*—*Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Management's evaluation of the effectiveness of the Company's internal control over financial reporting as of December 31, 2015 excluded the following entities that were acquired in 2015:

	the Co consolida statem	ts included in ompany's ted financial ents as of er 31, 2015	the C consolid statemen	nue included in lompany's ated financial ts for the year ember 31, 2015
		in mi	llions	
Cable Acquisition Company Inc., dba Choice Cable TV	\$	357.6	\$	52.1
Tullamore Beta Limited, the parent of TV3		116.4		4.4
	\$	474.0	\$	56.5

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of the Company as of December 31, 2015 and 2014, and the related consolidated statements of operations, comprehensive loss, equity and cash flows for each of the years in the three-year period ended December 31, 2015, and the related financial statement schedules I and II, and our report dated February 12, 2016 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

Denver, Colorado February 12, 2016

# Report of Independent Registered Public Accounting Firm

The Board of Directors Liberty Global plc:

We have audited the accompanying consolidated balance sheets of Liberty Global plc and subsidiaries (the Company) as of December 31, 2015 and 2014, and the related consolidated statements of operations, comprehensive loss, equity, and cash flows for each of the years in the three-year period ended December 31, 2015. In connection with our audits of the consolidated financial statements, we also have audited financial statement schedules I and II. These consolidated financial statements and financial statement schedules are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and financial statement schedules based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2015 and 2014, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2015, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedules, when considered in relation to the basic consolidated financial statements taken as a whole, present fairly, in all material respects, the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control*— *Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 12, 2016 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG LLP

Denver, Colorado February 12, 2016

# LIBERTY GLOBAL PLC CONSOLIDATED BALANCE SHEETS

	Decem	ber 3	31,
	2015		2014
	in mi	llion	S
ASSETS			
Current assets:			
Cash and cash equivalents	\$ 982.1	\$	1,158.5
Trade receivables, net	1,467.7		1,499.5
Derivative instruments (note 7)	421.9		446.6
Prepaid expenses	144.2		189.7
Deferred income taxes (notes 2 and 11)	_		290.3
Other current assets	341.5		335.9
Total current assets	3,357.4		3,920.5
Investments (including \$2,591.8 million and \$1,662.7 million, respectively, measured at fair value) (note 6)	2,839.6		1,808.2
Property and equipment, net (note 9)	21,684.0		23,840.6
Goodwill (note 9)	27,020.4		29,001.6
Intangible assets subject to amortization, net (note 9)	7,092.5		9,189.8
Other assets, net (notes 2, 7, 9 and 11)	5,873.3		5,081.2
Total assets.	\$ 67,867.2	\$	72,841.9

# CONSOLIDATED BALANCE SHEETS — (Continued)

		Decem	ber 3	31,
		2015		2014
LIADH ITIES AND EQUITY		in mi	llions	S
LIABILITIES AND EQUITY  Current liabilities:				
Accounts payable	¢	1,050.1	•	1,039.0
Deferred revenue and advance payments from subscribers and others		1,393.5	Ф	1,452.2
Current portion of debt and capital lease obligations (note 10)		2,537.9		1,550.9
Accrued interest		832.8		690.6
Accrued income taxes		483.5		413.7
Accrued capital expenditures		441.8		412.4
Derivative instruments (note 7)		346.3		1,043.7
Other accrued and current liabilities (notes 2, 11 and 14)		2,072.0		2,587.8
Total current liabilities		9,157.9		9,190.3
Long-term debt and capital lease obligations (note 10)		44,519.4		44,608.1
Other long-term liabilities (notes 2, 7, 11, 14 and 15)		4,015.6		4,927.5
Total liabilities		57,692.9		58,725.9
Commitments and contingencies (notes 4, 7, 10, 11, 15, 17 and 20)		37,092.9		36,723.9
Equity (note 12):				
Liberty Global shareholders:				
Liberty Global Shares — Class A, \$0.01 nominal value. Issued and outstanding				
252,766,455 and nil shares, respectively		2.5		_
Liberty Global Shares — Class B, \$0.01 nominal value. Issued and outstanding 10,472,517 and nil shares, respectively		0.1		_
Liberty Global Shares — Class C, \$0.01 nominal value. Issued and outstanding 584,044,394 and nil shares, respectively		5.9		_
LiLAC Shares — Class A, \$0.01 nominal value. Issued and outstanding 12,630,580 and nil shares, respectively		0.1		_
LiLAC Shares — Class B, \$0.01 nominal value. Issued and outstanding 523,423 and nil shares, respectively		_		_
LiLAC Shares — Class C, \$0.01 nominal value. Issued and outstanding 30,772,874 and nil shares, respectively		0.3		_
Old Liberty Global Shares — Class A, \$0.01 nominal value. Issued and outstanding nil and 251,167,686 shares, respectively		_		2.5
Old Liberty Global Shares — Class B, \$0.01 nominal value. Issued and outstanding nil and 10,139,184 shares, respectively		_		0.1
Old Liberty Global Shares — Class C, \$0.01 nominal value. Issued and outstanding nil and 630,353,372 shares, respectively		_		6.3
Additional paid-in capital		14,908.1		17,070.8
Accumulated deficit		(5,160.1)		(4,007.6)
Accumulated other comprehensive earnings, net of taxes		895.9		1,646.6
Treasury shares, at cost		(0.4)		(4.2)
Total Liberty Global shareholders		10,652.4		14,714.5
Noncontrolling interests		(478.1)		(598.5)
Total equity		10,174.3		14,116.0
Total liabilities and equity	\$	67,867.2	\$	72,841.9

The accompanying notes are an integral part of these consolidated financial statements.

# CONSOLIDATED STATEMENTS OF OPERATIONS

	 Year	end	led Decembe	r 31	l <b>,</b>
	 2015		2014		2013
	in millions	s, ex	cept per share	am	ounts
Revenue (note 18)	\$ 18,280.0	\$	18,248.3	\$	14,474.2
Operating costs and expenses:		_			
Operating (other than depreciation and amortization) (including share-based compensation) (note 13)	6,764.0		6,845.9		5,434.8
Selling, general and administrative (SG&A) (including share-based compensation) (note 13)	3,166.9		3,137.3		2,599.4
Depreciation and amortization	5,825.8		5,500.1		4,276.4
Release of litigation provision			_		(146.0)
Impairment, restructuring and other operating items, net (notes 4, 9, 14 and 17)	174.1		536.8		297.5
	15,930.8		16,020.1		12,462.1
Operating income	2,349.2		2,228.2		2,012.1
Non-operating income (expense):					
Interest expense	(2,441.4)		(2,544.7)		(2,286.9)
Interest and dividend income	35.9		31.7		113.1
Realized and unrealized gains (losses) on derivative instruments, net (note 7)	847.2		88.8		(1,020.4)
Foreign currency transaction gains (losses), net	(1,149.2)		(836.5)		349.3
Realized and unrealized gains due to changes in fair values of certain investments, net (notes 6 and 8)	124.5		205.2		524.1
Losses on debt modification and extinguishment, net (note 10)	(388.0)		(186.2)		(212.2)
Other expense, net	(62.8)		(42.4)		(5.6)
	(3,033.8)	_	(3,284.1)		(2,538.6)
Loss from continuing operations before income taxes	(684.6)	_	(1,055.9)		(526.5)
Income tax benefit (expense) (note 11)	(364.9)		75.0		(355.5)
Loss from continuing operations	(1,049.5)	_	(980.9)		(882.0)
Discontinued operation (note 5):			<u> </u>		
Earnings (loss) from discontinued operation, net of taxes			0.8		(23.7)
Gain on disposal of discontinued operation, net of taxes			332.7		
	_		333.5		(23.7)
Net loss	(1,049.5)		(647.4)		(905.7)
Net earnings attributable to noncontrolling interests	(103.0)		(47.6)		(58.2)
Net loss attributable to Liberty Global shareholders	\$ (1,152.5)	\$	(695.0)	\$	(963.9)
Basic and diluted earnings (loss) attributable to Liberty Global shareholders per share (notes 1 and 3):					
Liberty Global Shares	\$ (0.19)				
LiLAC Shares	\$ 0.39				
Old Liberty Global Shares:					
Continuing operations	\$ (1.13)	\$	(1.29)	\$	(1.39)
Discontinued operation		_	0.42		(0.04)
	\$ (1.13)	\$	(0.87)	\$	(1.43)

# LIBERTY GLOBAL PLC CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

	Yea	r en	ded Decemb	er 31,
	2015		2014	2013
		i	n millions	
Net loss.	\$ (1,049.5	5) \$	(647.4)	\$ (905.7)
Other comprehensive earnings (loss), net of taxes (note 16):				
Foreign currency translation adjustments	(732.9	9)	(935.9)	900.8
Reclassification adjustments included in net loss	1.5	;	124.4	(0.7)
Pension-related adjustments and other	(18.8	3)	(71.2)	11.3
Other comprehensive earnings (loss)	(750.2	2)	(882.7)	911.4
Comprehensive earnings (loss)	(1,799.7	<del>7</del> ) —	(1,530.1)	5.7
Comprehensive earnings attributable to noncontrolling interests	(103.5	5)	(47.1)	(41.3)
Comprehensive loss attributable to Liberty Global shareholders	\$ (1,903.2	<u>\$</u>	(1,577.2)	\$ (35.6)

# LIBERTY GLOBAL PLC CONSOLIDATED STATEMENTS OF EQUITY

Liberty Global shareholders

	Lil	Liberty Global ordinary shares	bal ires	IGI	GI common stock	tock	Additional		Accumulated other comprehensive	Treasury	Total Liberty	Non-	
	Class A	Class B	Class	Series A	Series B	Series C	paid-in capital	Accumulated deficit	earnings, net of taxes	shares, at cost	Global shareholders	controlling interests	Total equity
								in millions					
Balance at January 1, 2013	<b>~</b>	<b>~</b>	<b>&gt;</b>	\$ 1.4	\$ 0.1	\$ 5.1	\$ 2,951.6	\$ (2,348.7)	\$ 1,600.5	- -	\$ 2,210.0	\$ (124.9)	\$ 2,085.1
Net loss								(963.9)			(963.9)	58.2	(905.7)
Other comprehensive earnings, net of taxes (note 16)							l	l	928.3		928.3	(16.9)	911.4
Shares issued in connection with the Virgin Media Acquisition and impacts of related change in parent entity (note 4)	2.1	0.1	5.6	(1.4)	(0.1)	(5.1)	9,374.1		l		9,375.3	I	9,375.3
Revaluation of Virgin Media's convertible senior notes in connection with the Virgin Media Acquisition (note 4)	I	I	I	1	I	1	1,660.0	l	l		1,660.0	I	1,660.0
Repurchase and cancellation of Liberty Global and LGI shares (note 12)	(0.1)		(0.1)				(1,151.7)	I	I		(1,151.9)	I	(1,151.9)
Distributions by subsidiaries to noncontrolling interest owners (note 12)	I	1		1	I	1		l	l	I	l	(542.7)	(542.7)
Purchase of additional Telenet shares (note 12)							(525.7)				(525.7)	63.5	(462.2)
Share-based compensation (note 13)							206.3	I	l		206.3	1	206.3
Exchange of Virgin Media's convertible senior notes	0.1		0.1				113.5		1		113.7		113.7
Adjustments due to changes in subsidiaries' equity and other, net.	0.1						181.3	1	I	(7.7)	173.7	78.5	252.2
Balance at December 31, 2013	\$ 2.2	\$ 0.1	\$ 5.6	8	\$	8	\$ 12,809.4	\$ (3,312.6)	\$ 2,528.8	\$ (7.7)	\$ 12,025.8	\$ (484.3)	\$11,541.5

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY GLOBAL PLC

# CONSOLIDATED STATEMENTS OF EQUITY — (Continued)

Liberty Global shareholders

	Old Li	bert	Old Liberty Global Shares	l Sha	res	Additional			Accumulated other	Autocoal	İ	Total Liborty	Z		
	Class A Class B	C	lass B	CI	Class C	paid-in capital	Accumulated deficit	ulated	comprehensive earnings, net of taxes	shares, at		Global Shareholders	controlling interests	ling sts	Total equity
									in millions		 			   	
Balance at January 1, 2014 \$		2.2 \$	0.1	S	5.6	5.6 \$ 12,809.4 \$		(3,312.6) \$	\$ 2,528.8	<b>∵</b> \$	(7.7)	12,025.8 \$		84.3) \$	(484.3) \$ 11,541.5
Net loss							<u> </u>	(695.0)				(695.0)		47.6	(647.4)
Other comprehensive loss, net of taxes (note 16)									(882.2)		1	(882.2)		(0.5)	(882.7)
Repurchase and cancellation of Liberty Global ordinary shares (note 12)					(0.2)	(1,596.7)						(1,596.9)			(1,596.9)
VTR NCI Acquisition (note 12)					0.1	185.3						185.4	1)	(185.4)	
Shares issued in connection with the Ziggo Acquisition (note 4)	0.3				8.0	4,904.7			1		I	4,905.8	1,0	9.080,1	5,986.4
Impact of Ziggo NCI Acquisition and Statutory Squeeze-out (note 4)					0.1	663.8						663.9	(1,0	(1,080.6)	(416.7)
Share-based compensation (note 13)						216.0						216.0			216.0
Adjustments due to changes in subsidiaries' equity and other, net			-		(0.1)	(111.7)			1	•	3.5	(108.3)		24.1	(84.2)
Balance at December 31, 2014	\$ 2.5	-	0.1	S	6.3	\$ 17,070.8		\$ (4,007.6) \$	\$ 1,646.6	S	(4.2)	\$ 14,714.5	\$ (598.5)		\$ 14,116.0

The accompanying notes are an integral part of these consolidated financial statements.

# CONSOLIDATED STATEMENTS OF EQUITY — (Continued)

Liberty Global shareholders

						10 61 100	LIDGE CY CHORAL SHALL CHOLACES								
	Liberty Global Shares	F = S	LiLAC Shares	302	Old Liberty Global Shares	Additional paid-in capital	Accumulated deficit		Accumulated other comprehensive earnings, net of taxes	Treasury shares, at cost		Total Liberty Global shareholders	Non- controlling interests	g Total equity	. ~
		!   						in millions	ons						
Balance at January 1, 2015	<del>∽</del>	 \$		↔	8.9	8.9 \$17,070.8 \$		(4,007.6) \$	1,646.6 \$	↔	(4.2) \$	(4.2) \$ 14,714.5 \$ (598.5) \$14,116.0	\$ (598.	5) \$14,116	9.0
Net loss							(1,152.5)	52.5)				(1,152.5)	103.0	0 (1,049.5)	9.5)
Other comprehensive loss, net of taxes (note 16)					I				(750.7)			(750.7)	0.5	5 (750.2)	0.2)
Repurchase and cancellation of Liberty Global ordinary shares (note 12)	)	(0.1)			(0.1)	(2,344.3)						(2,344.5)	I	- (2,344.5)	4.5)
Share-based compensation (note 13)						284.3						284.3	ı	- 284.3	4.3
Liberty Global call option contracts	<u> </u>	(0.1)			(0.1)	(22.8)						(23.0)	ı	- (23	(23.0)
Impact of the LiLAC Transaction (note 1)		8.7	0.4		(8.7)	(0.4)							ı	'	
Adjustments due to changes in subsidiaries' equity and other, net						(79.5)			I		3.8	(75.7)	16.9		(58.8)
Balance at December 31, 2015 \$\frac{\\$}{=}\$		8.5	0.4	<del>     </del>	$  \cdot  $	\$ 14,908.1	\$ (5,160.1)	0.1) 	895.9	<del>S</del>	(0.4)	10,652.4	\$ (478.1)	1) \$10,174.3	4.3

The accompanying notes are an integral part of these consolidated financial statements.

# LIBERTY GLOBAL PLC CONSOLIDATED STATEMENTS OF CASH FLOWS

2015 12014 12013           Cash flows from operating activities:           Net loss         \$ (1,049.5)         \$ (647.4)         \$ (905.7)           Loss (earnings) from discontinued operation         ————————————————————————————————————			Year	end	ed December	31,	,
Cash flows from operating activities:         \$ (1,049.5)         \$ (647.4)         \$ (905.7)           Loss (earnings) from discontinued operation         — (333.5)         23.7           Loss from continuing operations         (1,049.5)         (980.9)         (882.0)           Adjustments to reconcile loss from continuing operations to net cash provided by operating activities:         318.2         257.2         300.7           Share-based compensation expense         318.2         257.2         300.7           Depreciation and amortization         5,825.8         5,500.1         4,276.4           Release of litigation provision         — — — (146.0)         140.0           Impairment, restructuring and other operating items, net         174.1         536.8         297.5           Amortization of deferred financing costs and non-cash interest accretion         80.8         84.3         78.0           Realized and unrealized losses (gains) on derivative instruments, net         (847.2)         (88.8)         1,020.4           Foreign currency transaction losses (gains), net         1,149.2         836.5         (349.3)           Realized and unrealized gains due to changes in fair values of certain investments, including impact of dividends         (121.4)         (203.7)         (523.1)           Losses on debt modification and extinguishment, net         388.0		$\equiv$	2015				2013
Net loss         \$ (1,049.5)         \$ (647.4)         \$ (905.7)           Loss (earnings) from discontinued operation         — (333.5)         23.7           Loss from continuing operations         (1,049.5)         (980.9)         (882.0)           Adjustments to reconcile loss from continuing operations to net cash provided by operating activities:         318.2         257.2         300.7           Depreciation and amortization         5,825.8         5,500.1         4,276.4           Release of litigation provision         — (146.0)         — (146.0)           Impairment, restructuring and other operating items, net         174.1         536.8         297.5           Amortization of deferred financing costs and non-cash interest accretion         80.8         84.3         78.0           Realized and unrealized losses (gains) on derivative instruments, net         (847.2)         (88.8)         1,020.4           Foreign currency transaction losses (gains), net         1,149.2         836.5         (349.3)           Realized and unrealized gains due to changes in fair values of certain investments, including impact of dividends         (121.4)         (203.7)         (523.1)           Losses on debt modification and extinguishment, net         388.0         186.2         212.2           Deferred income tax expense (benefit)         (50.1)         (350.6)	Cook flave from anarating activities:			in	millions		
Loss (earnings) from discontinued operations         —         (333.5)         23.7           Loss from continuing operations         (1,049.5)         (980.9)         (882.0)           Adjustments to reconcile loss from continuing operations to net cash provided by operating activities:         Share-based compensation expense         318.2         257.2         300.7           Depreciation and amortization         5,825.8         5,500.1         4,276.4           Release of litigation provision         —         —         —         (146.0)           Impairment, restructuring and other operating items, net         174.1         536.8         297.5           Amortization of deferred financing costs and non-cash interest accretion         80.8         84.3         78.0           Realized and unrealized losses (gains) on derivative instruments, net         (847.2)         (88.8)         1,020.4           Foreign currency transaction losses (gains), net         1,149.2         836.5         (349.3)           Realized and unrealized gains due to changes in fair values of certain investments, including impact of dividends         (121.4)         (203.7)         (523.1)           Losses on debt modification and extinguishment, net         388.0         186.2         212.2           Deferred income tax expense (benefit)         (50.1)         (350.6)         18.6		Ф	(1.040.5)	Ф	(617.1)	r	(005.7)
Loss from continuing operations			(1,049.3)	Ф	` ′	Þ	` ′
Adjustments to reconcile loss from continuing operations to net cash provided by operating activities:  Share-based compensation expense			(1.040.5)				
by operating activities:         318.2         257.2         300.7           Depreciation and amortization         5,825.8         5,500.1         4,276.4           Release of litigation provision.         —         —         (146.0)           Impairment, restructuring and other operating items, net         174.1         536.8         297.5           Amortization of deferred financing costs and non-cash interest accretion         80.8         84.3         78.0           Realized and unrealized losses (gains) on derivative instruments, net         (847.2)         (88.8)         1,020.4           Foreign currency transaction losses (gains), net.         1,149.2         836.5         (349.3)           Realized and unrealized gains due to changes in fair values of certain investments, including impact of dividends.         (121.4)         (203.7)         (523.1)           Losses on debt modification and extinguishment, net.         388.0         186.2         212.2           Deferred income tax expense (benefit)         (50.1)         (350.6)         18.6           Excess tax benefits from share-based compensation         (26.7)         (7.0)         (41.0)           Changes in operating assets and liabilities, net of the effects of acquisitions and dispositions:         (26.7)         (70.1)         (1,017.8)         (1,208.1)           Net cash provided (use			(1,049.5)		(980.9)		(882.0)
Depreciation and amortization         5,825.8         5,500.1         4,276.4           Release of litigation provision         —         —         —         (146.0)           Impairment, restructuring and other operating items, net         174.1         536.8         297.5           Amortization of deferred financing costs and non-cash interest accretion         80.8         84.3         78.0           Realized and unrealized losses (gains) on derivative instruments, net         (847.2)         (88.8)         1,020.4           Foreign currency transaction losses (gains), net         1,149.2         836.5         (349.3)           Realized and unrealized gains due to changes in fair values of certain investments, including impact of dividends         (121.4)         (203.7)         (523.1)           Losses on debt modification and extinguishment, net         388.0         186.2         212.2           Deferred income tax expense (benefit)         (50.1)         (350.6)         18.6           Excess tax benefits from share-based compensation         (26.7)         (7.0)         (41.0)           Changes in operating assets and liabilities, net of the effects of acquisitions and dispositions:         566.5         860.5         866.7           Payables and accruals         (701.9)         (1,017.8)         (1,208.1)           Net cash provided (used) by opera							
Release of litigation provision         —         —         —         (146.0)           Impairment, restructuring and other operating items, net         174.1         536.8         297.5           Amortization of deferred financing costs and non-cash interest accretion         80.8         84.3         78.0           Realized and unrealized losses (gains) on derivative instruments, net         (847.2)         (88.8)         1,020.4           Foreign currency transaction losses (gains), net         1,149.2         836.5         (349.3)           Realized and unrealized gains due to changes in fair values of certain investments, including impact of dividends         (121.4)         (203.7)         (523.1)           Losses on debt modification and extinguishment, net         388.0         186.2         212.2           Deferred income tax expense (benefit)         (50.1)         (350.6)         18.6           Excess tax benefits from share-based compensation         (26.7)         (7.0)         (41.0)           Changes in operating assets and liabilities, net of the effects of acquisitions and dispositions:         566.5         860.5         866.7           Payables and accruals         (701.9)         (1,017.8)         (1,208.1)           Net cash provided (used) by operating activities of discontinued operation         —         (9.6)         10.3 <td< td=""><td>Share-based compensation expense</td><td></td><td>318.2</td><td></td><td>257.2</td><td></td><td>300.7</td></td<>	Share-based compensation expense		318.2		257.2		300.7
Impairment, restructuring and other operating items, net	Depreciation and amortization		5,825.8		5,500.1		4,276.4
Amortization of deferred financing costs and non-cash interest accretion       80.8       84.3       78.0         Realized and unrealized losses (gains) on derivative instruments, net       (847.2)       (88.8)       1,020.4         Foreign currency transaction losses (gains), net       1,149.2       836.5       (349.3)         Realized and unrealized gains due to changes in fair values of certain investments, including impact of dividends       (121.4)       (203.7)       (523.1)         Losses on debt modification and extinguishment, net       388.0       186.2       212.2         Deferred income tax expense (benefit)       (50.1)       (350.6)       18.6         Excess tax benefits from share-based compensation       (26.7)       (7.0)       (41.0)         Changes in operating assets and liabilities, net of the effects of acquisitions and dispositions:       860.5       860.5       866.7         Payables and accruals       (701.9)       (1,017.8)       (1,208.1)         Net cash provided (used) by operating activities of discontinued operation       —       (9.6)       10.3         Net cash provided by operating activities       5,705.8       5,603.2       3,931.3     Cash flows from investing activities:  Capital expenditures  (2,499.5) (2,684.4) (2,481.5)	Release of litigation provision		_				(146.0)
Realized and unrealized losses (gains) on derivative instruments, net (847.2) (88.8) 1,020.4  Foreign currency transaction losses (gains), net	Impairment, restructuring and other operating items, net		174.1		536.8		297.5
Foreign currency transaction losses (gains), net	Amortization of deferred financing costs and non-cash interest accretion		80.8		84.3		78.0
Realized and unrealized gains due to changes in fair values of certain investments, including impact of dividends	Realized and unrealized losses (gains) on derivative instruments, net		(847.2)		(88.8)		1,020.4
investments, including impact of dividends	Foreign currency transaction losses (gains), net		1,149.2		836.5		(349.3)
Deferred income tax expense (benefit)	Realized and unrealized gains due to changes in fair values of certain investments, including impact of dividends		(121.4)		(203.7)		(523.1)
Excess tax benefits from share-based compensation	Losses on debt modification and extinguishment, net		388.0		186.2		212.2
Changes in operating assets and liabilities, net of the effects of acquisitions and dispositions:  Receivables and other operating assets 566.5 860.5 866.7  Payables and accruals (701.9) (1,017.8) (1,208.1)  Net cash provided (used) by operating activities of discontinued operation — (9.6) 10.3  Net cash provided by operating activities 5,705.8 5,603.2 3,931.3  Cash flows from investing activities:  Capital expenditures (2,499.5) (2,684.4) (2,481.5)	Deferred income tax expense (benefit)		(50.1)		(350.6)		18.6
and dispositions:  Receivables and other operating assets 566.5 860.5 866.7  Payables and accruals (701.9) (1,017.8) (1,208.1)  Net cash provided (used) by operating activities of discontinued operation — (9.6) 10.3  Net cash provided by operating activities 5,705.8 5,603.2 3,931.3  Cash flows from investing activities:  Capital expenditures (2,499.5) (2,684.4) (2,481.5)	Excess tax benefits from share-based compensation		(26.7)		(7.0)		(41.0)
Payables and accruals							
Net cash provided (used) by operating activities of discontinued operation.—(9.6)10.3Net cash provided by operating activities.5,705.85,603.23,931.3Cash flows from investing activities:(2,499.5)(2,684.4)(2,481.5)	Receivables and other operating assets		566.5		860.5		866.7
Net cash provided by operating activities 5,705.8 5,603.2 3,931.3  Cash flows from investing activities:  Capital expenditures (2,499.5) (2,684.4) (2,481.5)	Payables and accruals		(701.9)		(1,017.8)		(1,208.1)
Cash flows from investing activities: Capital expenditures	Net cash provided (used) by operating activities of discontinued operation		_		(9.6)		10.3
Capital expenditures	Net cash provided by operating activities		5,705.8		5,603.2		3,931.3
	Cash flows from investing activities:						
Institute in a 11-rest of City and others	Capital expenditures		(2,499.5)		(2,684.4)		(2,481.5)
investments in and loans to affiliates and others	Investments in and loans to affiliates and others		(999.6)		(1,016.6)		(1,350.3)
Cash paid in connection with acquisitions, net of cash acquired	Cash paid in connection with acquisitions, net of cash acquired		(385.8)		(73.3)		(4,073.4)
Proceeds received upon disposition of discontinued operation, net of disposal costs			_		988.5		_
Other investing activities, net	Other investing activities, net		55.5		(13.8)		(44.9)
Net cash used by investing activities of discontinued operation, including deconsolidated cash					(3.8)		(14.9)
Net cash used by investing activities	Net cash used by investing activities	\$	(3,829.4)	\$	(2,803.4)	5	(7,965.0)

# CONSOLIDATED STATEMENTS OF CASH FLOWS — (Continued)

		Year	ene	ded Decemb	er 3	1,
		2015		2014		2013
			i	n millions		
Cash flows from financing activities:						
Borrowings of debt		15,230.4	\$	9,572.4	\$	9,670.3
Repayments and repurchases of debt and capital lease obligations		(13,881.4)		(11,316.1)		(8,318.6)
Repurchase of Liberty Global ordinary shares		(2,320.5)		(1,584.9)		(1,157.2)
Payment of financing costs, debt premiums and exchange offer consideration		(423.3)		(379.8)		(389.6)
Net cash received (paid) related to derivative instruments		(301.2)		(221.0)		524.5
Purchase of additional shares of subsidiaries		(142.4)		(260.7)		(461.3)
Net cash received (paid) associated with call option contracts on Liberty Global ordinary shares		(78.3)		(41.7)		59.6
Change in cash collateral		(56.1)		(58.7)		3,593.8
Distributions by subsidiaries to noncontrolling interest owners		(11.3)		(12.1)		(541.0)
Decrease in restricted cash related to the Telenet Tender						1,539.7
Other financing activities, net		(53.7)		42.5		103.1
Net cash used by financing activities of discontinued operation				(1.2)		(7.4)
Net cash provided (used) by financing activities		(2,037.8)		(4,261.3)		4,615.9
Effect of exchange rate changes on cash – continuing operations	_	(15.0)		(81.9)		85.4
Net increase (decrease) in cash and cash equivalents:						
Continuing operations		(176.4)		(1,528.8)		679.6
Discontinued operation		_		(14.6)		(12.0)
Net increase (decrease) in cash and cash equivalents	_	(176.4)	_	(1,543.4)	_	667.6
Cash and cash equivalents:						
Beginning of year		1,158.5		2,701.9		2,038.9
End of year		982.1		1,158.5		2,706.5
Less cash and cash equivalents of discontinued operation at end of year						(4.6)
Cash and cash equivalents of continuing operations at end of year	\$	982.1	\$	1,158.5	\$	2,701.9
Cash paid for interest – continuing operations.	\$	2 170 4	¢	2,376.7	¢	2,148.8
Net cash paid for taxes:	<u> </u>	2,170.4	<u>\$</u>	2,370.7	<u>\$</u>	2,140.0
Continuing operations	¢	226.2	Φ	07.2	¢	07.5
Discontinued operation		236.3	\$	97.3	\$	97.5
•			Φ	2.2	Ф	11.7
Total	<b>\$</b>	236.3	\$	99.5	\$	109.2

# LIBERTY GLOBAL PLC Notes to Consolidated Financial Statements December 31, 2015, 2014 and 2013

# (1) <u>Basis of Presentation</u>

Liberty Global plc (**Liberty Global**) is a public limited company organized under the laws of England and Wales. In these notes, the terms "we," "our," "our company" and "us" may refer, as the context requires, to Liberty Global or collectively to Liberty Global and its subsidiaries.

We are an international provider of video, broadband internet, fixed-line telephony and mobile services, with consolidated operations at December 31, 2015 in 14 countries. Through our wholly-owned subsidiary Virgin Media Inc. (Virgin Media), we provide video, broadband internet, fixed-line telephony and mobile services in the United Kingdom (U.K.) and Ireland. Through Ziggo Group Holding B.V. (Ziggo Group Holding) and Unitymedia GmbH (Unitymedia), each a wholly-owned subsidiary, and Telenet Group Holding N.V. (Telenet), a 56.9%-owned subsidiary, we provide video, broadband internet, fixed-line telephony and mobile services in the Netherlands, Germany and Belgium, respectively. Through our wholly-owned subsidiary UPC Holding B.V. (UPC Holding), we provide (i) video, broadband internet and fixed-line telephony services in seven other European countries and (ii) mobile services in four other European countries. The operations of Virgin Media, Ziggo Group Holding, Unitymedia, Telenet and UPC Holding are collectively referred to herein as the "European Operations Division." In Chile, we provide video, broadband internet, fixed-line telephony and mobile services through our wholly-owned subsidiary VTR GlobalCom SpA (VTR). In Puerto Rico, we provide video, broadband internet and fixed-line telephony services through Liberty Cablevision of Puerto Rico (Liberty Puerto Rico), an entity in which we hold a 60.0% ownership interest. The operations of VTR and Liberty Puerto Rico are collectively referred to herein as the "LiLAC Division."

On July 1, 2015, we completed the approved steps of the "LiLAC Transaction" whereby we (i) reclassified our then outstanding Class A, Class B and Class C Liberty Global ordinary shares into corresponding classes of new Liberty Global ordinary shares (collectively, the Liberty Global Shares) and (ii) capitalized a portion of our share premium account and distributed as a dividend (or a "bonus issue" under U.K. law) our LiLAC Class A, Class B and Class C ordinary shares (collectively, the LiLAC Shares). In these notes, the term "Old Liberty Global Shares" may refer, as the context requires, to (a) our previously-outstanding Class A, Class B and Class C Liberty Global ordinary shares and/or (b) the previously-outstanding Series A, Series B and Series C common stock of Liberty Global, Inc. (LGI) (the predecessor to Liberty Global). Pursuant to the LiLAC Transaction, each holder of Class A, Class B and Class C Old Liberty Global Shares remained a holder of the same amount and class of Liberty Global Shares and received one share of the corresponding class of LiLAC Shares for each 20 Old Liberty Global Shares held as of the record date for such distribution. Accordingly, we issued 12,625,362 Class A, 523,626 Class B and 30,776,883 Class C LiLAC Shares. Cash was issued in lieu of fractional LiLAC Shares. The impact of the LiLAC Transaction on our capitalization and earnings (loss) per share presentation has been reflected in these consolidated financial statements prospectively from July 1, 2015. Accordingly, (1) our net earnings (loss) attributed to Liberty Global Shares and LiLAC Shares relates to the periods prior to July 1, 2015.

The Liberty Global Shares and the LiLAC Shares are tracking shares. Tracking shares are intended by the issuing company to reflect or "track" the economic performance of a particular business or "group," rather than the economic performance of the company as a whole. The Liberty Global Shares and the LiLAC Shares are intended to track the economic performance of the Liberty Global Group and the LiLAC Group, respectively (each as defined and described below). While the Liberty Global Group and the LiLAC Group have separate collections of businesses, assets and liabilities attributed to them, neither group is a separate legal entity and therefore cannot own assets, issue securities or enter into legally binding agreements. Holders of tracking shares have no direct claim to the group's assets and are not represented by separate boards of directors. Instead, holders of tracking shares are shareholders of the parent corporation, with a single board of directors, and are subject to all of the risks and liabilities of the parent corporation. We and our subsidiaries each continue to be responsible for our respective liabilities. Holders of Liberty Global Shares, LiLAC Shares and any other of our capital shares designated as ordinary shares from time to time will continue to be subject to risks associated with an investment in our company as a whole, even if a holder does not own both Liberty Global Shares and LiLAC Shares.

The "LiLAC Group" comprises our businesses, assets and liabilities in Latin America and the Caribbean and has attributed to it (i) VTR Finance B.V. (VTR Finance) and its subsidiaries, which include VTR, (ii) Lila Chile Holding B.V., which is the parent entity of VTR Finance, (iii) LiLAC Holdings Inc. (LiLAC Holdings) and its subsidiaries, which include Liberty Puerto Rico, (iv) LGE Coral Holdco Limited and its subsidiary, which were formed in anticipation of the acquisition of CWC (as described and defined in note 4), and (v) prior to July 1, 2015, the costs associated with certain corporate employees of Liberty Global that are exclusively focused on the management of the LiLAC Group (the LiLAC Corporate Costs). Effective July 1, 2015, these corporate employees were transferred to LiLAC Holdings. The "Liberty Global Group" comprises our businesses, assets and

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

liabilities not attributed to the LiLAC Group, including Virgin Media, Ziggo Group Holding, Unitymedia, Telenet, UPC Holding, our corporate entities (excluding the LiLAC Corporate Costs) and certain other less significant entities.

For additional information regarding our tracking share capital structure, including unaudited attributed financial information of the Liberty Global Group and the LiLAC Group, see Exhibit 99.1 to this Annual Report on Form 10-K.

On January 31, 2014, we completed the sale of substantially all of the assets (the **Chellomedia Disposal Group**) of Chellomedia B.V. (**Chellomedia**) (the **Chellomedia Transaction**). Chellomedia held certain of our programming interests in Europe and Latin America. We have accounted for the sale of the Chellomedia Disposal Group as a discontinued operation in our consolidated financial statements. For additional information regarding our discontinued operation, see note 5.

Unless otherwise indicated, ownership percentages and convenience translations into United States (U.S.) dollars are calculated as of December 31, 2015.

# (2) Accounting Changes and Recent Accounting Pronouncements

# Accounting Changes

In November 2015, the Financial Accounting Standards Board (**FASB**) issued Accounting Standards Update (**ASU**) No. 2015-17, *Balance Sheet Classification of Deferred Taxes* (**ASU 2015-17**). To simplify the presentation of deferred income taxes, ASU 2015-17 requires deferred tax assets and liabilities to be classified as noncurrent. ASU 2015-17 is effective for interim and annual periods beginning after December 15, 2016, with early adoption permitted. We early adopted ASU 2015-17 effective December 31, 2015 and, accordingly, all of our deferred tax balances are reflected as noncurrent in our December 31, 2015 consolidated balance sheet. Our December 31, 2014 deferred tax balances have not been retroactively revised.

# **Recent Accounting Pronouncements**

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers* (ASU 2014-09), which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. ASU 2014-09, as amended by ASU No. 2015-14, will replace existing revenue recognition accounting principles generally accepted in the United States (GAAP) when it becomes effective for annual and interim reporting periods beginning after December 15, 2017. Early application is permitted for annual and interim reporting periods that begin after December 15, 2016. This new standard permits the use of either the retrospective or cumulative effect transition method. We will adopt ASU 2014-09 effective January 1, 2018 and we are currently evaluating the effect that ASU 2014-09 will have on our consolidated financial statements and related disclosures. We have not yet selected a transition method nor have we determined the effect of the standard on our ongoing financial reporting.

# (3) Summary of Significant Accounting Policies

### **Estimates**

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Estimates and assumptions are used in accounting for, among other things, the valuation of acquisition-related assets and liabilities, allowances for uncollectible accounts, programming and copyright expenses, deferred income taxes and related valuation allowances, loss contingencies, fair value measurements, impairment assessments, capitalization of internal costs associated with construction and installation activities, useful lives of long-lived assets, share-based compensation and actuarial liabilities associated with certain benefit plans. Actual results could differ from those estimates.

# Reclassifications

Certain prior year amounts have been reclassified to conform to the current year presentation.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

# **Principles of Consolidation**

The accompanying consolidated financial statements include our accounts and the accounts of all voting interest entities where we exercise a controlling financial interest through the ownership of a direct or indirect controlling voting interest and variable interest entities for which our company is the primary beneficiary. All significant intercompany accounts and transactions have been eliminated in consolidation

# Cash and Cash Equivalents and Restricted Cash

Cash equivalents consist of money market funds and other investments that are readily convertible into cash and have maturities of three months or less at the time of acquisition. We record money market funds at the net asset value reported by the investment manager as there are no restrictions on our ability, contractual or otherwise, to redeem our investments at the stated net asset value reported by the investment manager.

Restricted cash consists of cash held in restricted accounts, including cash held as collateral for debt and other compensating balances. Restricted cash amounts that are required to be used to purchase long-term assets or repay long-term debt are classified as long-term assets. All other cash that is restricted to a specific use is classified as current or long-term based on the expected timing of the disbursement. At December 31, 2015 and 2014, our aggregate current and long-term restricted cash balances aggregated \$127.9 million and \$78.0 million, respectively.

Our significant non-cash investing and financing activities are disclosed in our consolidated statements of equity and in notes 4, 7, 9, and 10.

# Trade Receivables

Our trade receivables are reported net of an allowance for doubtful accounts. Such allowance aggregated \$115.7 million and \$116.1 million at December 31, 2015 and 2014, respectively. The allowance for doubtful accounts is based upon our assessment of probable loss related to uncollectible accounts receivable. We use a number of factors in determining the allowance, including, among other things, collection trends, prevailing and anticipated economic conditions and specific customer credit risk. The allowance is maintained until either payment is received or the likelihood of collection is considered to be remote.

Concentration of credit risk with respect to trade receivables is limited due to the large number of customers and their dispersion across many different countries worldwide. We also manage this risk by disconnecting services to customers whose accounts are delinquent.

### Investments

We make elections, on an investment-by-investment basis, as to whether we measure our investments at fair value. Such elections are generally irrevocable. With the exception of those investments over which we exercise significant influence, we generally elect the fair value method. For those investments over which we exercise significant influence, we generally elect the equity method.

Under the fair value method, investments are recorded at fair value and any changes in fair value are reported in realized and unrealized gains or losses due to changes in fair values of certain investments, net, in our consolidated statements of operations. All costs directly associated with the acquisition of an investment to be accounted for using the fair value method are expensed as incurred. Under the equity method of accounting, investments are recorded at cost and are subsequently increased or reduced to reflect the share of income or losses of the investee. All costs directly associated with the acquisition of an investment to be accounted for using the equity method are included in the carrying amount of the investment. For additional information regarding our fair value and equity method investments, see notes 6 and 8.

Dividends from publicly-traded investees are recognized when declared as dividend income in our consolidated statements of operations. Dividends from privately-held investees generally are reflected as reductions of the carrying values of the applicable investments.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Under the equity method, investments, originally recorded at cost, are adjusted to recognize our share of net earnings or losses of the affiliates as they occur rather than as dividends or other distributions are received, with our recognition of losses generally limited to the extent of our investment in, and advances and commitments to, the investee. The portion of the difference between our investment and our share of the net assets of the investee that represents goodwill is not amortized, but continues to be considered for impairment. Intercompany profits on transactions with equity affiliates for which assets remain on our or our investee's balance sheet are eliminated to the extent of our ownership in the investee.

We continually review our equity method investments to determine whether a decline in fair value below the cost basis is other-than-temporary. The primary factors we consider in our determination are the extent and length of time that the fair value of the investment is below our company's carrying value and the financial condition, operating performance and near-term prospects of the investee, changes in the stock price or valuation subsequent to the balance sheet date, and the impacts of exchange rates, if applicable. If the decline in fair value of an equity method investment is deemed to be other-than-temporary, the cost basis of the security is written down to fair value.

Realized gains and losses are determined on an average cost basis. Securities transactions are recorded on the trade date.

# Financial Instruments

Due to the short maturities of cash and cash equivalents, restricted cash, short-term liquid investments, trade and other receivables, other current assets, accounts payable, accrued liabilities, subscriber advance payments and deposits and other current liabilities, their respective carrying values approximate their respective fair values. For information concerning the fair values of certain of our investments, our derivatives and debt, see notes 6, 7 and 10, respectively. For information concerning how we arrive at certain of our fair value measurements, see note 8.

### **Derivative Instruments**

All derivative instruments, whether designated as hedging relationships or not, are recorded on the balance sheet at fair value. If the derivative instrument is not designated as a hedge, changes in the fair value of the derivative instrument are recognized in earnings. If the derivative instrument is designated as a fair value hedge, the changes in the fair value of the derivative instrument and of the hedged item attributable to the hedged risk are recognized in earnings. If the derivative instrument is designated as a cash flow hedge, the effective portions of changes in the fair value of the derivative instrument are recorded in other comprehensive earnings or loss and subsequently reclassified into our consolidated statements of operations when the hedged forecasted transaction affects earnings. Ineffective portions of changes in the fair value of cash flow hedges are recognized in earnings. With the exception of a limited number of our foreign currency forward contracts, we do not apply hedge accounting to our derivative instruments. For information regarding our derivative instruments, including our policy for classifying cash flows related to derivative instruments in our consolidated statements of cash flows, see note 7.

# Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. We capitalize costs associated with the construction of new cable transmission and distribution facilities and the installation of new cable services. Capitalized construction and installation costs include materials, labor and other directly attributable costs. Installation activities that are capitalized include (i) the initial connection (or drop) from our cable system to a customer location, (ii) the replacement of a drop and (iii) the installation of equipment for additional services, such as digital cable, telephone or broadband internet service. The costs of other customerfacing activities such as reconnecting customer locations where a drop already exists, disconnecting customer locations and repairing or maintaining drops, are expensed as incurred. Interest capitalized with respect to construction activities was not material during any of the periods presented.

Capitalized internal-use software is included as a component of property and equipment. We capitalize internal and external costs directly associated with the development of internal-use software. We also capitalize costs associated with the purchase of software licenses. Maintenance and training costs, as well as costs incurred during the preliminary stage of an internal-use software development project, are expensed as incurred.

Depreciation is computed using the straight-line method over the estimated useful life of the underlying asset. Equipment under capital leases is amortized on a straight-line basis over the shorter of the lease term or estimated useful life of the asset. Useful lives used to depreciate our property and equipment are assessed periodically and are adjusted when warranted. The useful

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

lives of cable distribution systems that are undergoing a rebuild are adjusted such that property and equipment to be retired will be fully depreciated by the time the rebuild is completed. For additional information regarding the useful lives of our property and equipment, see note 9.

Additions, replacements and improvements that extend the asset life are capitalized. Repairs and maintenance are charged to operations.

We recognize a liability for asset retirement obligations in the period in which it is incurred if sufficient information is available to make a reasonable estimate of fair values. Asset retirement obligations may arise from the loss of rights of way that we obtain from local municipalities or other relevant authorities. Under certain circumstances, the authorities could require us to remove our network equipment from an area if, for example, we were to discontinue using the equipment for an extended period of time or the authorities were to decide not to renew our access rights. However, because the rights of way are integral to our ability to deliver broadband communications services to our customers, we expect to conduct our business in a manner that will allow us to maintain these rights for the foreseeable future. In addition, we have no reason to believe that the authorities will not renew our rights of way and, historically, renewals have been granted. We also have obligations in lease agreements to restore the property to its original condition or remove our property at the end of the lease term. Sufficient information is not available to estimate the fair value of our asset retirement obligations in certain of our lease arrangements. This is the case for long-term lease arrangements in which the underlying leased property is integral to our operations, there is not an acceptable alternative to the leased property and we have the ability to indefinitely renew the lease. Accordingly, for most of our rights of way and certain lease agreements, the possibility is remote that we will incur significant removal costs in the foreseeable future and, as such, we do not have sufficient information to make a reasonable estimate of fair value for these asset retirement obligations.

As of December 31, 2015 and 2014, the recorded value of our asset retirement obligations was \$63.9 million and \$65.1 million, respectively.

# Intangible Assets

Our primary intangible assets relate to goodwill, customer relationships and cable television franchise rights. Goodwill represents the excess purchase price over the fair value of the identifiable net assets acquired in a business combination. Customer relationships and cable television franchise rights were originally recorded at their fair values in connection with business combinations.

Goodwill and other intangible assets with indefinite useful lives are not amortized, but instead are tested for impairment at least annually. Intangible assets with finite lives are amortized on a straight-line basis over their respective estimated useful lives to their estimated residual values, and reviewed for impairment.

We do not amortize our franchise rights and certain other intangible assets as these assets have indefinite lives. For additional information regarding the useful lives of our intangible assets, see note 9.

# Impairment of Property and Equipment and Intangible Assets

We review, when circumstances warrant, the carrying amounts of our property and equipment and our intangible assets (other than goodwill and other indefinite-lived intangible assets) to determine whether such carrying amounts continue to be recoverable. Such changes in circumstance may include (i) an expectation of a sale or disposal of a long-lived asset or asset group, (ii) adverse changes in market or competitive conditions, (iii) an adverse change in legal factors or business climate in the markets in which we operate and (iv) operating or cash flow losses. For purposes of impairment testing, long-lived assets are grouped at the lowest level for which cash flows are largely independent of other assets and liabilities, generally at or below the reporting unit level (see below). If the carrying amount of the asset or asset group is greater than the expected undiscounted cash flows to be generated by such asset or asset group, an impairment adjustment is recognized. Such adjustment is measured by the amount that the carrying value of such asset or asset group exceeds its fair value. We generally measure fair value by considering (a) sale prices for similar assets, (b) discounted estimated future cash flows using an appropriate discount rate and/or (c) estimated replacement cost. Assets to be disposed of are carried at the lower of their financial statement carrying amount or fair value less costs to sell.

We evaluate the goodwill, franchise rights and other indefinite-lived intangible assets for impairment at least annually on October 1 and whenever other facts and circumstances indicate that the carrying amounts of goodwill and other indefinite-lived

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

intangible assets may not be recoverable. For impairment evaluations with respect to both goodwill and other indefinite-lived intangibles, we first make a qualitative assessment to determine if the goodwill or other indefinite-lived intangible may be impaired. In the case of goodwill, if it is more-likely-than-not that a reporting unit's fair value is less than its carrying value, we then compare the fair value of the reporting unit to its respective carrying amount. A reporting unit is an operating segment or one level below an operating segment (referred to as a "component"). In most cases, our operating segments are deemed to be a reporting unit either because the operating segment is comprised of only a single component, or the components below the operating segment are aggregated as they have similar economic characteristics. If the carrying value of a reporting unit were to exceed its fair value, we would then compare the implied fair value of the reporting unit's goodwill to its carrying amount, and any excess of the carrying amount over the fair value would be charged to operations as an impairment loss. With respect to franchise rights or other indefinite-lived intangible asset is fair value and any excess of the carrying value over the fair value of the franchise right or other indefinite-lived intangible asset is also charged to operations as an impairment loss.

# Income Taxes

Income taxes are accounted for under the asset and liability method. We recognize deferred tax assets and liabilities for the future tax consequences attributable to differences between the financial statement carrying amounts and income tax basis of assets and liabilities and the expected benefits of utilizing net operating loss and tax credit carryforwards, using enacted tax rates in effect for each taxing jurisdiction in which we operate for the year in which those temporary differences are expected to be recovered or settled. We recognize the financial statement effects of a tax position when it is more-likely-than-not, based on technical merits, that the position will be sustained upon examination. Net deferred tax assets are then reduced by a valuation allowance if we believe it is more-likely-than-not such net deferred tax assets will not be realized. Certain of our valuation allowances and tax uncertainties are associated with entities that we acquired in business combinations. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in earnings in the period that includes the enactment date. Deferred tax liabilities related to investments in foreign subsidiaries and foreign corporate joint ventures that are essentially permanent in duration are not recognized until it becomes apparent that such amounts will reverse in the foreseeable future. Interest and penalties related to income tax liabilities are included in income tax expense in our consolidated statements of operations. For additional information on our income taxes, see note 11.

# Foreign Currency Translation and Transactions

The reporting currency of our company is the U.S. dollar. The functional currency of our foreign operations generally is the applicable local currency for each foreign subsidiary and equity method investee. Assets and liabilities of foreign subsidiaries (including intercompany balances for which settlement is not anticipated in the foreseeable future) are translated at the spot rate in effect at the applicable reporting date. With the exception of certain material transactions, the amounts reported in our consolidated statements of operations are translated at the average exchange rates in effect during the applicable period. The resulting unrealized cumulative translation adjustment, net of applicable income taxes, is recorded as a component of accumulated other comprehensive earnings or loss in our consolidated statements of equity. With the exception of certain material transactions, the cash flows from our operations in foreign countries are translated at the average rate for the applicable period in our consolidated statements of cash flows. The impacts of material transactions generally are recorded at the applicable spot rates in our consolidated statements of operations and cash flows. The effect of exchange rates on cash balances held in foreign currencies are separately reported in our consolidated statements of cash flows.

Transactions denominated in currencies other than our or our subsidiaries' functional currencies are recorded based on exchange rates at the time such transactions arise. Changes in exchange rates with respect to amounts recorded in our consolidated balance sheets related to these non-functional currency transactions result in transaction gains and losses that are reflected in our consolidated statements of operations as unrealized (based on the applicable period end exchange rates) or realized upon settlement of the transactions.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

# Revenue Recognition

Service Revenue — Cable Networks. We recognize revenue from the provision of video, broadband internet and fixed-line telephony services over our cable network to customers in the period the related services are provided. Installation revenue (including reconnect fees) related to services provided over our cable network is recognized as revenue in the period during which the installation occurs to the extent these fees are equal to or less than direct selling costs, which costs are expensed as incurred. To the extent installation revenue exceeds direct selling costs, the excess revenue is deferred and amortized over the average expected subscriber life.

Sale of Multiple Products and Services. We sell video, broadband internet, fixed-line telephony and, in certain markets, mobile services to our customers in bundled packages at a rate lower than if the customer purchased each product on a standalone basis. Revenue from bundled packages generally is allocated proportionally to the individual services based on the relative standalone price for each respective service.

Mobile Revenue — General. Arrangement consideration from mobile contracts is allocated to the airtime service element and the handset service element based on the relative standalone prices of each element. The amount of arrangement consideration allocated to the handset is limited to the amount that is not contingent upon the delivery of future airtime services. Certain of our operations that provide mobile services offer handsets under a subsidized contract model, whereby upfront revenue recognition is limited to the upfront cash collected from the customer as the remaining monthly fees to be received from the customer, including fees that may be associated with the handset, are contingent upon delivering future airtime services. At certain of our operations, mobile customers may choose to enter into two distinct contractual relationships: (i) a mobile handset contract and (ii) a mobile airtime services contract (a **Split-contract Program**). Under the mobile handset contract, the customer takes full title to the handset upon delivery and typically has the option to either (a) pay for the handset in cash upon delivery or (b) pay for the handset in installments over a contractual period. Under these arrangements, the handset installment payments are not contingent upon delivering future airtime services and the arrangement consideration allocated to the handset is not limited to the upfront cash collected.

Mobile Revenue — Airtime Services. We recognize revenue from mobile services in the period the related services are provided. Revenue from pre-pay customers is recorded as deferred revenue prior to the commencement of services and revenue is recognized as the services are rendered or usage rights expire.

Mobile Revenue — Handset Revenue. Arrangement consideration allocated to handsets is recognized as revenue when the goods have been delivered and title has passed. For customers under a mobile handset installment contract that is independent of a mobile airtime services contract, revenue is recognized upon delivery only if collectibility is reasonably assured. Our assessment of collectibility is based principally on internal and external credit assessments as well as historical collection information for similar customers. To the extent that collectibility of installment payments from the customer is not reasonably assured upon delivery of the handset, handset revenue is recognized on a cash basis as customer payments are received.

Business-to-Business (B2B) Revenue. We defer upfront installation and certain nonrecurring fees received on B2B contracts where we maintain ownership of the installed equipment. The deferred fees are amortized into revenue on a straight-line basis over the term of the arrangement or the expected period of performance.

*Promotional Discounts*. For subscriber promotions, such as discounted or free services during an introductory period, revenue is recognized only to the extent of the discounted monthly fees charged to the subscriber, if any.

Subscriber Advance Payments and Deposits. Payments received in advance for the services we provide are deferred and recognized as revenue when the associated services are provided.

Sales, Use and Other Value-Added Taxes (VAT). Revenue is recorded net of applicable sales, use and other value-added taxes.

# Share-Based Compensation

We recognize all share-based payments to employees, including grants of employee share incentive awards, based on their grant date fair values and our estimates of forfeitures. We recognize the grant date fair value of outstanding awards as a charge to operations over the vesting period. The cash benefits of tax deductions in excess of deferred taxes on recognized share-based

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

compensation expense are reported as a financing cash flow. Payroll taxes incurred in connection with the vesting or exercise of our share-based incentive awards are recorded as a component of share-based compensation expense in our consolidated statements of operations.

We use the straight-line method to recognize share-based compensation expense for our outstanding share awards that do not contain a performance condition and the accelerated expense attribution method for our outstanding share awards that contain a performance condition and vest on a graded basis.

We have calculated the expected life of options and share appreciation rights (**SAR**s) granted by Liberty Global to employees based on historical exercise trends. The expected volatility for Liberty Global options and SARs is generally based on a combination of (i) historical volatilities of Liberty Global ordinary shares for a period equal to the expected average life of the Liberty Global awards and (ii) volatilities implied from publicly-traded Liberty Global options.

Under U.K. corporate law, we are required to issue new shares of Liberty Global ordinary shares when Liberty Global options or SARs are exercised and when restricted share units (**RSU**s) and performance-based restricted share units (**PSU**s) vest. Although we repurchase Liberty Global ordinary shares from time to time, the parameters of our share purchase and redemption activities are not established solely with reference to the dilutive impact of our share-based compensation plans.

For additional information regarding our share-based compensation, see note 13.

### Litigation Costs

Legal fees and related litigation costs are expensed as incurred.

### Earnings or Loss per Share

Basic earnings or loss per share (**EPS**) is computed by dividing net earnings or loss by the weighted average number of shares (excluding restricted shares) outstanding for the period. Diluted earnings or loss per share presents the dilutive effect, if any, on a per share basis of potential shares (e.g., options, SARs, performance-based share appreciation rights (**PSARs**), restricted shares, RSUs and convertible securities) as if they had been exercised, vested or converted at the beginning of the periods presented.

The details of our net earnings (loss) attributable to holders of Liberty Global Shares, LiLAC Shares and Old Liberty Global Shares are set forth below:

	Year ended December 31,				
	2015		2014		2013
		ir	millions		
Net earnings (loss) attributable to holders of:					
Liberty Global Shares (a)	\$ (167.5)	\$	_	\$	
LiLAC Shares (a)	17.2				
Old Liberty Global Shares (b):					
Loss from continuing operations	(1,002.2)		(1,028.5)		(937.6)
Earnings (loss) from discontinued operation	_		333.5		(26.3)
	(1,002.2)		(695.0)		(963.9)
Net loss attributable to Liberty Global shareholders	\$ (1,152.5)	\$	(695.0)	\$	(963.9)

<sup>(</sup>a) The amounts presented for the year ended December 31, 2015 relate to the period from July 1, 2015 through December 31, 2015.

<sup>(</sup>b) The amounts presented for the year ended December 31, 2015 relate to the period from January 1, 2015 through June 30, 2015.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

The details of our weighted average shares outstanding are set forth below:

	Year	Year ended December 31,				
	2015	2014	2013			
Weighted average shares outstanding:						
Liberty Global Shares — basic and diluted (a)	864,721,483					
LiLAC Shares (a):						
Basic	43,915,757					
Diluted	44,235,275					
Old Liberty Global Shares — basic and diluted (b)	884,040,481	798,869,761	672,348,540			

- (a) The amounts presented for the year ended December 31, 2015 relate to the period from July 1, 2015 through December 31, 2015.
- (b) The amounts presented for the year ended December 31, 2015 relate to the period from January 1, 2015 through June 30, 2015

Liberty Global Shares. We reported a loss from continuing operations attributable to holders of Liberty Global Shares for the period from July 1, 2015 through December 31, 2015. Therefore, the potentially dilutive effect at December 31, 2015 of the following items was not included in the computation of diluted loss per share attributable to holders of Liberty Global Shares because their inclusion would have been anti-dilutive to the computation or, in the case of certain PSUs and Performance Grant Units (PGUs), because such awards had not yet met the applicable performance criteria: (i) the aggregate number of shares issuable pursuant to outstanding options, SARs, PSARs and RSUs of approximately 43.3 million, (ii) the aggregate number of shares issuable pursuant to PSUs and PGUs of approximately 4.5 million and (iii) the aggregate number of shares issuable pursuant to obligations that may be settled in cash or shares of approximately 2.7 million.

*LiLAC Shares*. The details of the calculation of EPS with respect to LiLAC Shares for the period from July 1, 2015 through December 31, 2015 are set forth in the following table:

#### Numerator:

Net earnings attributable to holders of LiLAC Shares (basic and diluted EPS computation) (in millions)	\$	17.2
Denominator:		
Weighted average ordinary shares (basic EPS computation)		43,915,757
Incremental shares attributable to the assumed exercise of outstanding options, SARs and PSARs and the release of share units upon vesting (treasury stock method)		319,518
Weighted average ordinary shares (diluted EPS computation)	_	44,235,275

A total of 0.7 million options, SARs, PSARs and RSUs were excluded from the calculation of diluted earnings per share during the period from July 1, 2015 through December 31, 2015 because their effect would have been anti-dilutive.

Old Liberty Global Shares. We reported losses from continuing operations attributable to holders of Old Liberty Global Shares for the period from January 1, 2015 through June 30, 2015 and the years ended December 31, 2014 and 2013. Therefore, the potentially dilutive effect at June 30, 2015, December 31, 2014 and December 31, 2013 of the following items was not included in the computation of diluted loss per share attributable to holders of Old Liberty Global Shares because their inclusion would have been anti-dilutive to the computation or, in the case of certain PSUs and PGUs, because such awards had not yet met the applicable performance criteria: (i) the aggregate number of shares issuable pursuant to outstanding options, SARs, PSARs and restricted shares and RSUs of approximately 42.1 million, 39.1 million and 40.3 million, respectively, (ii) the aggregate number of shares issuable pursuant to PSUs and PGUs of approximately 5.3 million, 5.4 million and 3.7 million, respectively, and (iii) the aggregate number of shares issuable pursuant to obligations that may be settled in cash or shares of approximately 2.6 million for each of the respective dates.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

## (4) Acquisitions

### Pending 2016 Acquisition

CWC. On November 16, 2015, we announced, pursuant to Rule 2.7 of the U.K. City Code on Takeovers and Mergers, the terms of a recommended acquisition pursuant to which we would acquire Cable & Wireless Communications Plc (CWC) for shares of Liberty Global in a scheme of arrangement. Under the terms of the transaction, CWC shareholders will be entitled to receive up to, in the aggregate: 31,651,616 Class A Liberty Global Shares, 77,488,978 Class C Liberty Global Shares, 3,648,524 Class A LiLAC Shares and 8,939,328 Class C LiLAC Shares. Further, CWC shareholders would be entitled to receive a special dividend in the amount of £0.03 (\$0.04) per CWC share at the closing of the transaction, which would be in lieu of any previously-announced CWC dividend. We expect that the dividend and estimated fees and expenses will be funded from CWC liquidity, including incremental debt borrowings, and LiLAC Group liquidity. Completion of the acquisition, which is expected to occur during the second quarter of 2016, is subject to, among other conditions, Liberty Global and CWC shareholder approvals, certain regulatory approvals and court sanction of the scheme of arrangement. In connection with the proposed acquisition, we entered into an agreement with CWC to, among other things, provide our reasonable co-operation to CWC to complete the acquisition. If the acquisition of CWC is not completed as expected, under certain limited circumstances, we could be required to pay CWC a termination fee of \$50 million.

Following completion of the acquisition of CWC, we intend to attribute CWC to the LiLAC Group, with the Liberty Global Group being granted an inter-group interest in the LiLAC Group. Based on the fully-diluted numbers of Liberty Global Shares, LiLAC Shares and CWC shares outstanding on November 16, 2015, after giving effect to the acquisition and such attribution, and treating the Liberty Global Group's inter-group interest in the LiLAC Group as being represented by additional LiLAC Shares, Liberty Global Group shareholders would have had an approximate 67.4% ownership interest in the LiLAC Group.

For information regarding an acquisition we completed subsequent to December 31, 2015, see note 20.

### 2015 Acquisition

On June 3, 2015, pursuant to a stock purchase agreement with the parent of Puerto Rico Cable Acquisition Company Inc., dba Choice Cable TV (Choice) and following regulatory approval, one of our subsidiaries, together with investment funds affiliated with Searchlight Capital Partners, L.P. (collectively, Searchlight), acquired 100% of Choice (the Choice Acquisition). Choice is a cable and broadband services provider in Puerto Rico. We acquired Choice in order to achieve certain financial, operational and strategic benefits through the integration of Choice with Liberty Puerto Rico. The combined business is 60.0%-owned by our company and 40.0%-owned by Searchlight.

The purchase price for Choice of \$276.4 million was funded through (i) Liberty Puerto Rico's incremental debt borrowings, net of discount and fees, of \$259.1 million, (ii) cash of \$10.5 million and (iii) an equity contribution from Searchlight of \$6.8 million.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

We have accounted for the Choice Acquisition using the acquisition method of accounting, whereby the total purchase price was allocated to the acquired identifiable net assets of Choice based on assessments of their respective fair values, and the excess of the purchase price over the fair values of these identifiable net assets was allocated to goodwill. A summary of the purchase price and the preliminary opening balance sheet for the Choice Acquisition at the June 3, 2015 acquisition date is presented in the following table. The preliminary opening balance sheet is subject to adjustment based on our final assessment of the fair values of the acquired identifiable assets and liabilities. Although most items in the valuation process remain open, the items with the highest likelihood of changing upon finalization of the valuation process include property and equipment, goodwill, intangible assets associated with franchise rights and customer relationships and income taxes (in millions):

Cash and cash equivalents	\$ 3.6
Other current assets	7.8
Property and equipment, net	79.8
Goodwill (a)	51.6
Intangible assets subject to amortization, net (b)	59.1
Franchise rights	147.8
Other assets, net	0.3
Other accrued and current liabilities	(13.2)
Non-current deferred tax liabilities	(60.4)
Total purchase price (c)	\$ 276.4

- (a) The goodwill recognized in connection with the Choice Acquisition is primarily attributable to (i) the ability to take advantage of Choice's existing advanced broadband communications network to gain immediate access to potential customers and (ii) synergies that are expected to be achieved through the integration of Choice with Liberty Puerto Rico. The entire amount of goodwill is expected to be deductible for U.S. tax purposes.
- (b) Amount primarily includes intangible assets related to customer relationships. As of June 3, 2015, the weighted average useful life of Choice's intangible assets was approximately ten years.
- (c) Excludes direct acquisition costs of \$8.5 million incurred through December 31, 2015, which are included in impairment, restructuring and other operating items, net, in our consolidated statement of operations.

### 2014 Acquisition

On November 11, 2014 (the **Ziggo Acquisition Date**), pursuant to a merger protocol (the **Ziggo Merger Protocol**) with respect to an offer to acquire all of the shares of Ziggo Holding B.V. (**Ziggo**) that we did not already own (the **Ziggo Offer**), we gained control of Ziggo through the acquisition of 136,603,794 additional Ziggo shares, which increased our ownership interest in Ziggo to 88.9% (the **Ziggo Acquisition**). From November 12, 2014 through November 19, 2014, we acquired 18,998,057 additional Ziggo shares, further increasing our ownership interest in Ziggo to 98.4% (the **Ziggo NCI Acquisition**). Ziggo is a provider of video, broadband internet, fixed-line telephony and mobile services in the Netherlands. We acquired Ziggo in order to achieve certain financial, operational and strategic benefits through the integration of Ziggo with with our existing operations in the Netherlands and our other European operations.

Pursuant to the Ziggo Merger Protocol, Ziggo shareholders who tendered their Ziggo shares received an offer price of (i) 0.2282 Class A Old Liberty Global Shares, (ii) 0.5630 Class C Old Liberty Global Shares and (iii) €11.00 (\$13.71 at the applicable rates) in cash for each Ziggo share that they tendered. In connection with the completion of the Ziggo Acquisition and the Ziggo NCI Acquisition, we (a) issued an aggregate of 35,508,342 Class A and 87,603,842 Class C Old Liberty Global Shares and (b) paid aggregate cash consideration of €1,711.6 million (\$2,133.6 million at the applicable rates) to holders of Ziggo ordinary shares.

On December 3, 2014, we initiated a statutory squeeze-out procedure in accordance with the Dutch Civil Code (the **Statutory Squeeze-out**) in order to acquire the remaining 3,162,605 Ziggo shares not tendered through November 19, 2014. Under the Statutory Squeeze-out, which was completed during the second quarter of 2015, Ziggo shareholders other than Liberty Global

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

received cash consideration of €39.78 (\$44.91 at the applicable rates) per share, plus interest, for an aggregate of €125.9 million (\$142.2 million at the applicable rates). This amount was approved in April 2015 by the Enterprise Court in the Netherlands.

For accounting purposes, (i) the Ziggo Acquisition was treated as the acquisition of Ziggo by Liberty Global and (ii) the Ziggo NCI Acquisition and the Statutory Squeeze-out were treated as the acquisitions of a noncontrolling interest.

In connection with the completion of the Ziggo Acquisition, we obtained regulatory clearance from the European Commission on October 10, 2014, subject to the following commitments:

- our commitment to divest our *Film1* channels to a third party and to carry *Film1* on our network in the Netherlands for a period of three years. Accordingly, on July 21, 2015, we sold our *Film1* channels to Sony Pictures Television Networks. Under the terms of the agreement, all five *Film1* channels will continue to be carried on certain of our networks for a period of at least three years; and
- our commitment for a period of eight years with respect to our network in the Netherlands (i) not to enforce certain clauses currently contained in carriage agreements with broadcasters that restrict the ability of broadcasters to offer their channels and content via over-the-top services, (ii) not to enter into carriage agreements containing such clauses and (iii) to maintain adequate interconnection capacity through at least three uncongested routes into our network in the Netherlands, at least one of which must be with a large transit provider.

In July 2015, the Dutch incumbent telecommunications operator filed an appeal against the European Commission regarding its decision to approve the Ziggo Acquisition. We are not a party to the appeal and we do not expect that the filing of this appeal will have any impact on the ongoing integration and development of our operations in the Netherlands.

For accounting purposes, the Ziggo Acquisition was treated as the acquisition of Ziggo by Liberty Global. In this regard, the equity and cash consideration paid to acquire Ziggo plus the fair value of our pre-existing investment in Ziggo on the Ziggo Acquisition Date is set forth below (in millions):

Class A Old Liberty Global Shares (a)\$	1,448.7
Class C Old Liberty Global Shares (a)	3,457.1
Cash (b)	1,872.9
Fair value of pre-existing investment in Ziggo (c)	2,015.4
Total	8,794.1

<sup>(</sup>a) Represents the value assigned to the 31,172,985 Class A and 76,907,936 Class C Old Liberty Global Shares issued to Ziggo shareholders in connection with the Ziggo Acquisition through the Ziggo Acquisition Date. These amounts are based on (i) the exchange ratios specified by the Ziggo Merger Protocol, (ii) the applicable closing per share prices of Class A and Class C Old Liberty Global Shares and (iii) 136,603,794 ordinary shares of Ziggo tendered in the Ziggo Offer through the Ziggo Acquisition Date.

<sup>(</sup>b) Represents the cash consideration paid in connection with the Ziggo Acquisition.

<sup>(</sup>c) Represents the fair value of the 41,329,850 shares of Ziggo held by Liberty Global and its subsidiaries immediately prior to the Ziggo Acquisition.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

We have accounted for the Ziggo Acquisition using the acquisition method of accounting, whereby the total purchase price was allocated to the acquired identifiable net assets of Ziggo based on assessments of their respective fair values, and the excess of the purchase price over the fair values of these identifiable net assets was allocated to goodwill. A summary of the purchase price and the preliminary opening balance sheet for the Ziggo Acquisition as of the Ziggo Acquisition Date is presented in the following table. The opening balance sheet presented below reflects our final purchase price allocation (in millions):

Cash and cash equivalents (a)	\$ 1,	,889.7
Other current assets		69.7
Property and equipment, net	2,	,714.9
Goodwill (b)	7,	,866.5
Intangible assets subject to amortization, net (c)	4.	,857.0
Other assets, net		382.8
Current portion of debt and capital lease obligations.	(	(604.0)
Other accrued and current liabilities	(	(461.8)
Long-term debt and capital lease obligations.	(5,	,351.5)
Other long-term liabilities	(1,	,488.6)
Noncontrolling interest (d)	(1,	,080.6)
Total purchase price (e)	\$ 8.	,794.1

- (a) The Ziggo Acquisition resulted in \$16.8 million of net cash acquired after deducting the cash consideration paid.
- (b) The goodwill recognized in connection with the Ziggo Acquisition is primarily attributable to (i) the ability to take advantage of Ziggo's existing advanced broadband communications network to gain immediate access to potential customers and (ii) synergies that are expected to be achieved through the integration of Ziggo with our existing operations in the Netherlands and our other European operations.
- (c) Amount primarily includes intangible assets related to customer relationships. As of the Ziggo Acquisition Date, the weighted average useful life of Ziggo's intangible assets was approximately ten years.
- (d) Represents the fair value of the noncontrolling interest in Ziggo as of the Ziggo Acquisition Date.
- (e) Excludes direct acquisition costs of \$84.1 million incurred through December 31, 2014, which are included in impairment, restructuring and other operating items, net, in our consolidated statement of operations.

We have accounted for the Ziggo NCI Acquisition as an equity transaction, with the carrying amount of the noncontrolling interest adjusted to reflect the change in ownership of Ziggo. The difference between the fair value of consideration paid and the amount by which the noncontrolling interest was adjusted has been recognized as additional paid-in capital in our consolidated statement of equity. The impact of the Ziggo NCI Acquisition is summarized in the following table (in millions):

Reduction of noncontrolling interests	\$ 927.2
Additional paid-in capital	23.5
Fair value of consideration paid (a)	\$ 950.7

<sup>(</sup>a) Represents (i) the value assigned to the 4,335,357 Class A and 10,695,906 Class C Old Liberty Global Shares issued to Ziggo shareholders and (ii) cash consideration of €209.0 million (\$260.7 million at the applicable rates) paid to Ziggo shareholders, based on the 18,998,057 ordinary shares of Ziggo tendered in connection with the Ziggo NCI Acquisition.

The cash consideration paid in the Ziggo Acquisition and the Ziggo NCI Acquisition was funded with a combination of debt and our existing liquidity. For information regarding the various debt financing arrangements that we entered into in connection

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

with the execution of the Ziggo Merger Protocol and the completion of the Ziggo Acquisition and the Ziggo NCI Acquisition, see note 10.

### 2013 Acquisition

On June 7, 2013, pursuant to an Agreement and Plan of Merger (the **Virgin Media Merger Agreement**) with Virgin Media and following receipt of regulatory and shareholder approvals, we acquired Virgin Media in a stock and cash merger (the **Virgin Media Acquisition**). Virgin Media is one of the U.K.'s largest providers of residential video, broadband internet, fixed-line telephony and mobile services in terms of number of customers. We acquired Virgin Media in order to achieve certain financial, operational and strategic benefits through the integration of Virgin Media with our existing European operations.

Pursuant to the Virgin Media Merger Agreement:

- Each share of common stock of Virgin Media was converted into the right to receive (i) 0.2582 Class A Old Liberty Global Shares, (ii) 0.6438 Class C Old Liberty Global Shares and (iii) \$17.50 in cash; and
- Each share of Series A common stock of LGI was converted into the right to receive one Class A Old Liberty Global Share; each share of Series B common stock of LGI was converted into the right to receive one Class B Old Liberty Global Share; and each share of Series C common stock of LGI was converted into the right to receive one Class C Old Liberty Global Share.

In connection with the completion of the Virgin Media Acquisition, we issued 70,233,842 Class A and 175,122,182 Class C Old Liberty Global Shares to holders of Virgin Media common stock and 141,234,331 Class A, 10,176,295 Class B and 362,556,220 Class C Old Liberty Global Shares to holders of LGI Series A, Series B and Series C common stock, respectively.

In connection with the execution of the Virgin Media Merger Agreement, we entered into various debt financing arrangements.

In a transaction that did not impact our cash and cash equivalents, the net proceeds (after deducting certain transaction expenses) from the February 2013 issuance of the April 2021 VM Senior Secured Notes and 2023 VM Senior Notes (each as defined and described in note 10) of \$3,557.5 million (equivalent at the transaction date) were placed into segregated escrow accounts (the **Virgin Media Escrow Accounts**) with a trustee. Such net proceeds were released in connection with the closing of the Virgin Media Acquisition.

The Virgin Media Acquisition and related refinancing transactions were funded with a combination of (i) the proceeds from the Virgin Media Escrow Accounts, (ii) borrowings under the VM Credit Facility (as defined and described in note 10) and (iii) our and Virgin Media's existing liquidity.

For accounting purposes, the Virgin Media Acquisition was treated as the acquisition of Virgin Media by Liberty Global (as the successor to LGI). In this regard, the equity and cash consideration paid to acquire Virgin Media is set forth below (in millions):

Class A Old Liberty Global Shares (a)	\$ 2,735.0
Class C Old Liberty Global Shares (a)	6,369.9
Cash (b)	4,760.2
Fair value of the vested portion of Virgin Media stock incentive awards (c)	270.4
Total equity and cash consideration.	\$ 14,135.5

<sup>(</sup>a) Represents the value assigned to the 70,233,842 Class A and 175,122,182 Class C Old Liberty Global Shares issued to Virgin Media shareholders in connection with the Virgin Media Acquisition. These amounts are based on (i) the exchange ratios specified by the Virgin Media Merger Agreement, (ii) the closing per share price on June 7, 2013 of Series A and Series C LGI common stock of \$38.94 and \$36.37, respectively, and (iii) the 272,013,333 outstanding shares of Virgin Media common stock at June 7, 2013.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

- (b) Represents the cash consideration paid in connection with the Virgin Media Acquisition. This amount is based on (i) the \$17.50 per share cash consideration specified by the Virgin Media Merger Agreement and (ii) the 272,013,333 outstanding shares of Virgin Media common stock at June 7, 2013.
- (c) Represents the portion of the estimated fair value of the Virgin Media stock incentive awards that are attributable to services provided prior to the June 7, 2013 acquisition date. The estimated fair value is based on the attributes of the 13.03 million outstanding Virgin Media stock incentive awards at June 7, 2013, including the market price of the underlying Virgin Media common stock. The outstanding Virgin Media stock incentive awards at June 7, 2013 include 9.86 million stock options that have been valued using Black Scholes option valuations. In addition, Virgin Media's stock incentive awards at June 7, 2013 included 3.17 million restricted stock units that included performance conditions and, in certain cases, market conditions. Those restricted stock units with market conditions have been valued using Monte Carlo simulation models.

We have accounted for the acquisition of Virgin Media using the acquisition method of accounting, whereby the total purchase price was allocated to the acquired identifiable net assets of Virgin Media based on assessments of their respective fair values, and the excess of the purchase price over the fair values of these identifiable net assets was allocated to goodwill. A summary of the purchase price and opening balance sheet for the Virgin Media Acquisition at the June 7, 2013 acquisition date is presented in the following table. The opening balance sheet presented below reflects our final purchase price allocation (in millions):

Cash and cash equivalents	\$ 694.6
Other current assets	932.2
Property and equipment, net	9,863.1
Goodwill (a)	9,000.8
Intangible assets subject to amortization (b)	3,925.8
Other assets, net.	4,259.4
Current portion of debt and capital lease obligations.	(1,184.5)
Other accrued and current liabilities (c) (d)	(1,892.2)
Long-term debt and capital lease obligations.	(8,477.4)
Other long-term liabilities (c)	(1,326.3)
Additional paid-in capital (e)	(1,660.0)
Total purchase price (f)	\$ 14,135.5

- (a) The goodwill recognized in connection with the Virgin Media Acquisition is primarily attributable to (i) the ability to take advantage of Virgin Media's existing advanced broadband communications network to gain immediate access to potential customers and (ii) synergies that were expected to be achieved through the integration of Virgin Media with our other broadband communications operations in Europe.
- (b) Amount primarily includes intangible assets related to customer relationships. At June 7, 2013, the weighted average useful life of Virgin Media's intangible assets was approximately seven years.
- (c) No amounts were allocated to deferred revenue with respect to the then ongoing performance obligations associated with Virgin Media's B2B service contracts, as the remaining fees to be received under these contracts approximated fair value given our estimates of the costs associated with these performance obligations.
- (d) Amount includes a \$35.6 million liability that was recorded to adjust an unfavorable capacity contract to its estimated fair value. This amount was amortized through the March 31, 2014 expiration date of the contract as a reduction of Virgin Media's operating expenses so that the net effect of this amortization and the payments required under the contract approximated market rates. During the period from June 8, 2013 through December 31, 2013 and the year ended December 31, 2014, \$22.8 million and \$12.8 million, respectively, of this liability was amortized as a reduction of operating expenses in our consolidated statements of operations.

## Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

- (e) Represents the equity component of the 6.50% convertible senior notes (the **VM Convertible Notes**). During the period from June 7, 2013 through December 31, 2013, 94.4% of the VM Convertible Notes were exchanged for Class A and Class C Old Liberty Global Shares and cash pursuant to the terms of the indenture underlying the VM Convertible Notes.
- (f) Excludes direct acquisition costs of \$51.5 million incurred through December 31, 2014, which are included in impairment, restructuring and other operating items, net, in our consolidated statements of operations.

### Pro Forma Information

The following unaudited pro forma consolidated operating results give effect to (i) the acquisition of 100% of Ziggo and (ii) the Choice Acquisition, as if they had been completed as of January 1, 2014. These pro forma amounts are not necessarily indicative of the operating results that would have occurred if these transactions had occurred on such date. The pro forma adjustments are based on certain assumptions that we believe are reasonable. In the following table, we present the revenue that is attributed to the Liberty Global Group and the LiLAC Group as if such revenue had been attributed to each group at the beginning of each period presented. However, our presentation of net earnings (loss) and basic and diluted earnings (loss) per share attributed to (a) Liberty Global Shares, (b) LiLAC Shares and (c) Old Liberty Global Shares only includes the results of operations for the periods during which these shares were outstanding. Accordingly, (1) our net earnings (loss) attributed to Liberty Global Shares and LiLAC Shares relates to the period from July 1, 2015 through December 31, 2015 and (2) our net loss attributed to Old Liberty Global Shares relates to periods prior to July 1, 2015.

	Year ended Decemb			ember 31,
	2015		2014	
		in millions, except share amounts		
Revenue:		Share a		ints
Liberty Global Group:				
Continuing operations	\$	17,062.7	\$	18,890.1
Discontinued operation				26.6
Total Liberty Global Group		17,062.7		18,916.7
LiLAC Group		1,254.4		1,291.9
Total	\$	18,317.1	\$	20,208.6
Net earnings (loss) attributable to Liberty Global shareholders:				
Liberty Global Shares	\$	(167.5)	\$	
LiLAC Shares		17.2		
Old Liberty Global Shares		(1,000.4)		(1,181.0)
Total	\$	(1,150.7)	\$	(1,181.0)
Basic and diluted earnings (loss) attributable to Liberty Global shareholders per share:				
Liberty Global Shares	\$	(0.19)		
LiLAC Shares	\$	0.39		
Old Liberty Global Shares	\$	(1.13)	\$	(1.30)

Our consolidated statement of operations for 2015 includes revenue and net earnings of \$52.1 million and \$4.6 million, respectively, attributable to Choice.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

The following unaudited pro forma consolidated operating results give effect to (i) the acquisition of 100% of Ziggo and (ii) the Virgin Media Acquisition, as if they had been completed as of January 1, 2013. These pro forma amounts are not necessarily indicative of the operating results that would have occurred if these transactions had occurred on such date. The pro forma adjustments are based on certain assumptions that we believe are reasonable. In the following table, we present the revenue that is attributed to the Liberty Global Group and the LiLAC Group as if such revenue had been attributed to each group at the beginning of each period presented. However, our presentation of net loss and basic and diluted loss per share attributed to (a) Liberty Global Shares, (b) LiLAC Shares and (c) Old Liberty Global Shares only includes the results of operations for the periods during which these shares were outstanding. Accordingly, our net loss for 2014 and 2013 is entirely attributed to Old Liberty Global Shares.

	Year ended Decembe			ember 31,
		2014		2013
	in millions, except per share amounts			
Revenue:				
Liberty Global Group:				
Continuing operations	\$	18,890.1	\$	18,013.7
Discontinued operation		26.6		408.6
Total Liberty Global Group		18,916.7		18,422.3
LiLAC Group		1,204.6		1,288.8
Intergroup eliminations				(1.3)
Total	\$	20,121.3	\$	19,709.8
Net loss attributable to Liberty Global shareholders — Old Liberty Global Shares	¢	(1.180.6)	•	(1,573.6)
	Φ	(1,180.0)	ф —	(1,373.0)
Basic and diluted loss attributable to Liberty Global shareholders per share — Old Liberty Global Shares	\$	(1.30)	\$	(1.71)

Our consolidated statement of operations for 2014 includes revenue and net loss of \$272.0 million and \$98.7 million, respectively, attributable to Ziggo.

### (5) <u>Discontinued Operation</u>

On January 31, 2014, we completed the sale of the Chellomedia Disposal Group to AMC Networks Inc. for €750.0 million (\$1,013.1 million at the applicable rate) in cash. Accordingly, the Chellomedia Disposal Group is reflected as a discontinued operation in our consolidated statements of operations and cash flows for 2014 and 2013. The assets disposed of pursuant to the Chellomedia Transaction exclude Chellomedia's premium sports and film channels in the Netherlands. In connection with the sale of the Chellomedia Disposal Group, we recognized a pre-tax gain of \$342.2 million. This pre-tax gain is net of a \$64.0 million cumulative foreign currency translation loss, which was reclassified to net loss from accumulated other comprehensive earnings. The associated income tax expense of \$9.5 million differs from the amount computed by applying the U.K. statutory income tax rate in effect at the time of 21.5% primarily due to the fact that (i) the transaction was not subject to taxation in the U.K. and (ii) most elements of the transaction were not subject to taxation in the Netherlands or the U.S. The net after-tax gain of \$332.7 million is included in gain on disposal of discontinued operation, net of taxes, in our consolidated statement of operations.

Certain of our broadband communications operations will continue to receive programming services from the Chellomedia Disposal Group through contracts that were negotiated as part of the disposal. As such, Liberty Global will have continuing cash outflows associated with the Chellomedia Disposal Group through at least 2017. However, our involvement as an ongoing customer of the Chellomedia Disposal Group does not disqualify discontinued operations classification because (i) the ongoing cash outflows are not considered significant to the Chellomedia Disposal Group and (ii) Liberty Global does not possess any rights within the ongoing contractual arrangements that would allow us to exert influence over the Chellomedia Disposal Group.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

The operating results of the Chellomedia Disposal Group are classified as a discontinued operation in our consolidated statements of operations and are summarized in the following table:

	Year ended December 31,				
	2014 (a) (b)			2013 (b)	
		in mi	in millions		
Revenue	\$	26.6	\$	408.6	
Operating income	\$	0.6	\$	12.1	
Earnings (loss) before income taxes and noncontrolling interests	\$	0.9	\$	(1.0)	
Income tax expense	\$	(0.1)	\$	(22.7)	
Earnings (loss) from discontinued operation attributable to Liberty Global shareholders, net of taxes	\$	0.8	\$	(26.3)	

<sup>(</sup>a) Includes the operating results of the Chellomedia Disposal Group through January 31, 2014, the date the Chellomedia Disposal Group was sold.

# (6) <u>Investments</u>

The details of our investments are set forth below:

	 Decem	ber 3	81,
Accounting Method	2015		2014
	in mi	llion	S
Fair value:			
ITV — subject to re-use rights	\$ 1,624.1	\$	871.2
Sumitomo	471.1		473.1
Lionsgate	162.0		_
ITI Neovision	120.0		154.1
Other	214.6		164.3
Total — fair value	2,591.8		1,662.7
Equity	247.4		145.1
Cost	0.4		0.4
Total	\$ 2,839.6	\$	1,808.2

<sup>(</sup>b) Excludes the Chellomedia Disposal Group's intercompany revenue and expenses that are eliminated within Liberty Global's consolidated financial statements.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

#### Fair Value Investments

ITV. On July 17, 2014, we acquired an aggregate of 259,820,065 shares of ITV plc (ITV), a commercial broadcaster in the U.K., at a price of £1.85 (\$3.14 at the transaction date) per share, for an investment of £480.7 million (\$816.3 million at the transaction date) (the Initial ITV Investment). On July 30, 2015, we acquired an additional 138,695,445 shares of ITV at a per share price of £2.716 (\$4.23 at the transaction date), for an additional investment of £376.7 million (\$587.0 million at the transaction date) (the Additional ITV Investment), which together with the Initial ITV Investment constitutes our total investment in ITV (the Total ITV Investment). The aggregate purchase price paid to acquire the Total ITV Investment was financed through borrowings under secured borrowing arrangements (the ITV Collar Loan). The Total ITV Investment comprises 398,515,510 shares, or approximately 9.9% of the total outstanding shares of ITV as of June 30, 2015, the most current publicly-available information. All of the ITV shares we hold are subject to a share collar (the ITV Collar) and pledged as collateral under the ITV Collar Loan. Under the terms of the ITV Collar, the counterparty has the right to re-use all of the pledged ITV shares. For additional information regarding the ITV Collar, see note 7.

*Sumitomo*. At December 31, 2015 and 2014, we owned 45,652,043 shares of Sumitomo Corporation (**Sumitomo**) common stock. Our Sumitomo shares represented less than 5% of Sumitomo's outstanding common stock at December 31, 2015. These shares secure the Sumitomo Collar Loan, as defined and described in note 7.

Lionsgate. On November 12, 2015, we acquired an aggregate of 5.0 million shares of Lions Gate Entertainment Corp. (Lionsgate), at a price of \$39.02 per share, for an investment of \$195.1 million. The aggregate purchase price of the Lionsgate shares was financed using working capital, including \$70.9 million of cash received pursuant to a variable prepaid forward transaction with respect to 2.5 million Lionsgate shares (the Lionsgate Forward). The Lionsgate Forward has economic characteristics similar to a collar plus a loan that is collateralized by a pledge of the aforementioned 2.5 million shares (the Lionsgate Loan). Under the terms of the Lionsgate Forward, the counterparty does not have the right to re-use the pledged Lionsgate shares without permission from Liberty Global. In connection with our acquisition of the Lionsgate shares, we also agreed, among other things and subject to certain exceptions, not to sell or transfer any of our Lionsgate shares (other than pursuant to the Lionsgate Forward) until November 2016. Our Lionsgate shares represented less than 5% of the total outstanding shares of Lionsgate as of the acquisition date. For additional information regarding the Lionsgate Forward, see note 7.

*ITI Neovision*. At December 31, 2015 and 2014, we owned a 17.0% interest in ITI Neovision S.A. (**ITI Neovision**) (formerly Canal+ Cyfrowy S.A.), a privately-held direct-to-home (**DTH**) operator in Poland.

### **Equity Method Investments**

All3Media. As of December 31, 2015, our most significant equity method investment is our investment in All3Media Holdings Limited (All3Media), an independent television, film and digital production and distribution company in the U.K. Our investment in All3Media is held through our 50.0% interest in DLG Acquisition Limited (DLG), a joint venture between one of our subsidiaries and a subsidiary of Discovery Communications, Inc. (Discovery). In September 2014, we and a subsidiary of Discovery each contributed £90.0 million (\$147.2 million at the transaction date) to DLG in connection with DLG's acquisition of 100% of All3Media. The December 31, 2015 carrying value of our investment in DLG, including a loan to DLG, was \$132.1 million.

### (7) <u>Derivative Instruments</u>

In general, we seek to enter into derivative instruments to protect against (i) increases in the interest rates on our variable-rate debt and (ii) foreign currency movements, particularly with respect to borrowings that are denominated in a currency other than the functional currency of the borrowing entity. In this regard, through our subsidiaries, we have entered into various derivative instruments to manage interest rate exposure and foreign currency exposure with respect to the U.S. dollar (\$), the euro (€), the British pound sterling (£), the Swiss franc (CHF), the Chilean peso (CLP), the Czech koruna (CZK), the Hungarian forint (HUF), the Polish zloty (PLN) and the Romanian lei (RON). With the exception of a limited number of our foreign currency forward contracts, we do not apply hedge accounting to our derivative instruments. Accordingly, changes in the fair values of most of our derivative instruments are recorded in realized and unrealized gains or losses on derivative instruments, net, in our consolidated statements of operations.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

The following table provides details of the fair values of our derivative instrument assets and liabilities:

	<b>December 31, 2015</b>						D	ber 31, 2014	ļ		
	Current		ong-term (a)		Total	_	Current		g-term (a)		Total
					in mi	llion	ıs				
Assets:											
Cross-currency and interest rate derivative contracts:											
Liberty Global Group	\$ 263.6	\$	1,518.5	\$	1,782.1	\$	443.6	\$	812.5	\$	1,256.1
LiLAC Group	11.8		291.7		303.5				101.2		101.2
Total cross-currency and interest rate derivative contracts (b)	275.4		1,810.2		2,085.6		443.6		913.7		1,357.3
Equity-related derivative instruments - Liberty Global Group (c)	135.5		273.0		408.5		_		400.2		400.2
Foreign currency forward contracts:											
Liberty Global Group	6.2				6.2		1.4		_		1.4
LiLAC Group	4.2				4.2		1.1		_		1.1
Total foreign currency forward contracts	10.4				10.4		2.5				2.5
Other - Liberty Global Group	0.6		1.0		1.6		0.5		0.9		1.4
Total assets:											
Liberty Global Group	405.9		1,792.5		2,198.4		445.5		1,213.6		1,659.1
LiLAC Group	16.0		291.7		307.7		1.1		101.2		102.3
Total	\$ 421.9	\$	2,084.2	\$	2,506.1	\$	446.6	\$	1,314.8	\$	1,761.4
Liabilities:											
Cross-currency and interest rate derivative contracts:											
Liberty Global Group	\$ 304.9	\$	1,194.7	\$	1,499.6	\$	987.9	\$	1,443.9	\$	2,431.8
LiLAC Group	_		13.8		13.8		39.5				39.5
Total cross-currency and interest rate derivative contracts (b)	304.9		1,208.5		1,513.4		1,027.4		1,443.9		2,471.3
Equity-related derivative instruments - Liberty Global Group (c)	34.7		39.7		74.4		15.3		73.1		88.4
Foreign currency forward contracts:											
Liberty Global Group	1.1		_		1.1		0.6		_		0.6
LiLAC Group	_						0.2				0.2
Total foreign currency forward contracts	1.1		_		1.1		0.8				0.8
Other - Liberty Global Group	5.6		0.1		5.7		0.2		0.1		0.3
Total liabilities:											-
Liberty Global Group	346.3		1,234.5		1,580.8		1,004.0		1,517.1		2,521.1
LiLAC Group	_		13.8		13.8		39.7				39.7
Total	\$ 346.3	\$	1,248.3	\$	1,594.6	\$	1,043.7	\$	1,517.1	\$	2,560.8

<sup>(</sup>a) Our long-term derivative assets and liabilities are included in other assets, net, and other long-term liabilities, respectively, in our consolidated balance sheets.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

- (b) We consider credit risk in our fair value assessments. As of December 31, 2015 and 2014, (i) the fair values of our cross-currency and interest rate derivative contracts that represented assets have been reduced by credit risk valuation adjustments aggregating \$64.0 million and \$30.9 million, respectively, and (ii) the fair values of our cross-currency and interest rate derivative contracts that represented liabilities have been reduced by credit risk valuation adjustments aggregating \$86.5 million and \$64.6 million, respectively. The adjustments to our derivative assets relate to the credit risk associated with counterparty nonperformance, and the adjustments to our derivative liabilities relate to credit risk associated with our own nonperformance. In all cases, the adjustments take into account offsetting liability or asset positions within a given contract. Our determination of credit risk valuation adjustments generally is based on our and our counterparties' credit risks, as observed in the credit default swap market and market quotations for certain of our subsidiaries' debt instruments, as applicable. The changes in the credit risk valuation adjustments associated with our cross-currency and interest rate derivative contracts resulted in net gains (losses) of (\$9.3 million), (\$120.9 million) and \$15.3 million during 2015, 2014 and 2013, respectively. These amounts are included in realized and unrealized gains (losses) on derivative instruments, net, in our consolidated statements of operations. For further information regarding our fair value measurements, see note 8.
- (c) Our equity-related derivative instruments include the fair value of (i) the ITV Collar, (ii) the share collar (the **Sumitomo Collar**) with respect to the shares of Sumitomo Corporation held by our company, (iii) the Lionsgate Forward (at December 31, 2015 only), and (iv) the Virgin Media Capped Calls (as defined and described below). The fair values of the ITV Collar, the Sumitomo Collar and the Lionsgate Forward, each as further described below, do not include credit risk valuation adjustments as we assume that any losses incurred by our company in the event of nonperformance by the respective counterparty would be, subject to relevant insolvency laws, fully offset against amounts we owe to such counterparty pursuant to the related secured borrowing arrangements.

The details of our realized and unrealized gains (losses) on derivative instruments, net, are as follows:

	Year	er 3	er 31,		
	2015		2014		2013
		in	millions		
Cross-currency and interest rate derivative contracts:					
Liberty Global Group	\$ 855.7	\$	252.5	\$	(600.2)
LiLAC Group	217.0		41.1		13.7
Total cross-currency and interest rate derivative contracts	1,072.7		293.6		(586.5)
Equity-related derivative instruments - Liberty Global Group:					
ITV Collar	(222.6)		(77.4)		_
Sumitomo Collar	(20.3)		(46.0)		(206.4)
Lionsgate Forward	14.5		_		_
Ziggo Collar (a)			(113.3)		(152.5)
Other	0.7		0.4		(3.4)
Total equity-related derivative instruments	(227.7)		(236.3)		(362.3)
Foreign currency forward contracts:					
Liberty Global Group	(9.0)		29.0		(73.9)
LiLAC Group	10.3		2.6		1.0
Total foreign currency forward contracts	1.3		31.6		(72.9)
Other - Liberty Global Group	0.9		(0.1)		1.3
Total Liberty Global Group	619.9		45.1		(1,035.1)
Total LiLAC Group	227.3		43.7		14.7
Total	\$ 847.2	\$	88.8	\$	(1,020.4)

<sup>(</sup>a) Upon completion of the Ziggo Acquisition, the Ziggo Collar (as defined and described below) was terminated.

## Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

The net cash received or paid related to our derivative instruments is classified as an operating, investing or financing activity in our consolidated statements of cash flows based on the objective of the derivative instrument and the classification of the applicable underlying cash flows. For foreign currency forward contracts that are used to hedge capital expenditures, the net cash received or paid is classified as an adjustment to capital expenditures in our consolidated statements of cash flows. For derivative contracts that are terminated prior to maturity, the cash paid or received upon termination that relates to future periods is classified as a financing activity. The classification of these net cash inflows (outflows) is as follows:

	Year	er 31	31,		
	2015		2014		2013
		in	millions		
Operating activities:					
Liberty Global Group	\$ (225.9)	\$	(425.2)	\$	(358.1)
LiLAC Group	(28.8)		(20.5)		(44.0)
Total operating activities	(254.7)		(445.7)		(402.1)
Investing activities:					
Liberty Global Group	15.6		(30.2)		(66.5)
LiLAC Group	2.2				_
Total investing activities	17.8		(30.2)		(66.5)
Financing activities:					
Liberty Global Group	(301.2)		(183.6)		524.5
LiLAC Group			(37.4)		_
Total financing activities	(301.2)		(221.0)		524.5
Total cash outflows:					
Liberty Global Group	(511.5)		(639.0)		99.9
LiLAC Group	(26.6)		(57.9)		(44.0)
Total	\$ (538.1)	\$	(696.9)	\$	55.9

### Counterparty Credit Risk

We are exposed to the risk that the counterparties to the derivative instruments of our subsidiary borrowing groups will default on their obligations to us. We manage these credit risks through the evaluation and monitoring of the creditworthiness of, and concentration of risk with, the respective counterparties. In this regard, credit risk associated with our derivative instruments is spread across a relatively broad counterparty base of banks and financial institutions. Collateral is generally not posted by either party under the derivative instruments of our subsidiary borrowing groups. At December 31, 2015, our exposure to counterparty credit risk included derivative assets with an aggregate fair value of \$2,025.2 million.

Each of our subsidiary borrowing groups have entered into derivative instruments under master agreements with each counterparty that contain master netting arrangements that are applicable in the event of early termination by either party to such derivative instrument. The master netting arrangements under each of these master agreements are limited to the derivative instruments governed by the relevant master agreement within each individual borrowing group and are independent of similar arrangements of our other subsidiary borrowing groups.

Under our derivative contracts, it is generally only the non-defaulting party that has a contractual option to exercise early termination rights upon the default of the other counterparty and to set off other liabilities against sums due upon such termination. However, in an insolvency of a derivative counterparty, under the laws of certain jurisdictions, the defaulting counterparty or its insolvency representatives may be able to compel the termination of one or more derivative contracts and trigger early termination payment liabilities payable by us, reflecting any mark-to-market value of the contracts for the counterparty. Alternatively, or in addition, the insolvency laws of certain jurisdictions may require the mandatory set off of amounts due under such derivative contracts against present and future liabilities owed to us under other contracts between us and the relevant counterparty. Accordingly, it is possible that we may be subject to obligations to make payments, or may have present or future liabilities owed to us partially or fully discharged by set off as a result of such obligations, in the event of the insolvency of a derivative counterparty, even though it is the counterparty that is in default and not us. To the extent that we are required to make such payments, our ability to do so

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

will depend on our liquidity and capital resources at the time. In an insolvency of a defaulting counterparty, we will be an unsecured creditor in respect of any amount owed to us by the defaulting counterparty, except to the extent of the value of any collateral we have obtained from that counterparty.

In addition, where a counterparty is in financial difficulty, under the laws of certain jurisdictions, the relevant regulators may be able to (i) compel the termination of one or more derivative instruments, determine the settlement amount and/or compel, without any payment, the partial or full discharge of liabilities arising from such early termination that are payable by the relevant counterparty or (ii) transfer the derivative instruments to an alternative counterparty.

#### **Details of our Derivative Instruments**

In the following tables, we present the details of the various categories of our subsidiaries' derivative instruments. For each subsidiary with multiple derivative instruments that mature within the same calendar month, the notional amounts are shown in the aggregate, and interest rates are presented on a weighted average basis. In addition, for derivative instruments that were in effect as of December 31, 2015, we present a single date that represents the applicable final maturity date. For derivative instruments that become effective subsequent to December 31, 2015, we present a range of dates that represents the period covered by the applicable derivative instruments

### Cross-currency and Interest Rate Derivative Contracts

Cross-currency Swaps:

The terms of our outstanding cross-currency swap contracts at December 31, 2015 are as follows:

Subsidiary / Final maturity date	due from due to d		Interest rate due from counterparty	Interest rate due to counterparty		
		in m	illio	ns		
Virgin Media Investment Holdings Limited (VMIH), a subsidiary of Virgin Media:						
January 2023	\$	400.0	€	339.6	5.75%	4.33%
June 2023	\$	1,855.0	£	1,198.3	6 mo. LIBOR + 2.75%	6 mo. GBP LIBOR + 3.18%
February 2022	\$	1,400.0	£	873.6	5.01%	5.49%
January 2023	\$	1,000.0	£	648.6	5.25%	5.32%
January 2021	\$	500.0	£	308.9	5.25%	6 mo. GBP LIBOR + 2.06%
October 2022	\$	450.0	£	272.0	6.00%	6.43%
January 2022	\$	425.0	£	255.8	5.50%	5.82%
April 2019	\$	191.5	£	122.3	5.38%	5.49%
November 2016 (a)	\$	55.0	£	27.7	6.50%	7.03%
October 2019	\$	50.0	£	30.3	8.38%	8.98%
October 2019 - October 2022	\$	50.0	£	30.7	6.00%	5.75%
UPC Broadband Holding B.V. (UPC Broadband Holding), a subsidiary of UPC Holding:						
January 2023	\$	1,140.0	€	1,043.7	5.38%	3.71%
July 2021	\$	440.0	€	337.2	6 mo. LIBOR + 2.50%	6 mo. EURIBOR + 2.87%
January 2017 - July 2021	\$	262.1	€	194.1	6 mo. LIBOR + 2.50%	6 mo. EURIBOR + 2.51%
January 2020	\$	252.5	€	192.5	6 mo. LIBOR + 4.93%	7.49%

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Subsidiary / Final maturity date	amo sidiary / due f		Notional Notional amount amount due from due to aturity date counterparty counterparty			mount due to	Interest rate due from counterparty	Interest rate due to counterparty
		in m	illions					
November 2019	\$	250.0	€	181.5	7.25%	7.74%		
November 2021	\$	250.0	€	181.4	7.25%	7.50%		
October 2020	\$	125.0	€	91.3	6 mo. LIBOR + 3.00%	6 mo. EURIBOR + 3.04%		
January 2020	\$	122.5	€	93.4	6 mo. LIBOR + 4.94%	6 mo. EURIBOR + 4.87%		
December 2016	\$	340.0	CHF	370.9	6 mo. LIBOR + 3.50%	6 mo. CHF LIBOR + 4.01%		
July 2016 (a)	\$	225.0	CHF	206.3	6 mo. LIBOR + 4.81%	1.00%		
July 2016 - January 2020	\$	225.0	CHF	206.3	6 mo. LIBOR + 4.81%	5.44%		
July 2021	\$	200.0	CHF	186.0	6 mo. LIBOR + 2.50%	6 mo. CHF LIBOR + 2.55%		
January 2017 - July 2023	\$	200.0	CHF	185.5	6 mo. LIBOR + 2.50%	6 mo. CHF LIBOR + 2.48%		
November 2019	\$	175.0	CHF	158.7	7.25%	6 mo. CHF LIBOR + 5.01%		
January 2017 - July 2021	\$	100.0	CHF	92.8	6 mo. LIBOR + 2.50%	6 mo. CHF LIBOR + 2.49%		
July 2016 (a)	\$	201.5	RON	489.3	6 mo. LIBOR + 3.50%	1.40%		
July 2016 - July 2020	\$	201.5	RON	489.3	6 mo. LIBOR + 3.50%	11.34%		
January 2021	€	720.8	CHF	877.0	6 mo. EURIBOR + 2.50%	6 mo. CHF LIBOR + 2.62%		
January 2017 - September 2022	€	383.8	CHF	477.0	6 mo. EURIBOR + 2.00%	6 mo. CHF LIBOR + 2.22%		
January 2017	€	360.4	CHF	589.0	6 mo. EURIBOR + 3.75%	6 mo. CHF LIBOR + 3.94%		
October 2016	€	285.1	CHF	346.7	10.51%	(0.73)%		
October 2016 - April 2018	€	285.1	CHF	346.7	10.51%	9.87%		
January 2020	€	175.0	CHF	258.6	7.63%	6.76%		
July 2020	€	107.4	CHF	129.0	6 mo. EURIBOR + 3.00%	6 mo. CHF LIBOR + 3.28%		
July 2023	€	85.3	CHF	95.0	6 mo. EURIBOR + 2.21%	6 mo. CHF LIBOR + 2.65%		
July 2021	€	76.1	CHF	92.1	6 mo. EURIBOR + 2.50%	6 mo. CHF LIBOR + 2.88%		
January 2017	€	75.0	CHF	110.9	7.63%	6.98%		
January 2020	€	318.9	CZK	8,818.7	5.58%	5.44%		
January 2017	€	60.0	CZK	1,703.1	5.50%	6.99%		
July 2017	€	39.6	CZK	1,000.0	3.00%	3.75%		
July 2016 (a)	€	260.0	HUF	75,570.0	5.50%	5.00%		
July 2016 - January 2017	€	260.0	HUF	75,570.0	5.50%	10.56%		
December 2016	€	150.0	HUF	43,367.5	5.50%	2.00%		
July 2018	€	78.0	HUF	19,500.0	5.50%	9.15%		
January 2017	€	245.0	PLN	1,000.6	5.50%	9.03%		
September 2016	€	200.0	PLN	892.7	6.00%	3.91%		
January 2020	€	144.6	PLN	605.0	5.50%	7.98%		
July 2017	€	82.0	PLN	318.0	3.00%	5.60%		

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Subsidiary / Final maturity date		Notional amount due from ounterparty	8	Notional nmount due to nterparty	Interest rate due from counterparty	Interest rate due to counterparty
		in n	nillions			
Amsterdamse Beheer-en Consultingmaatschappij B.V. ( <b>ABC B.V.</b> ), a subsidiary of Ziggo Group Holding:						
January 2022	\$	2,350.0	€	1,819.0	6 mo. LIBOR + 2.75%	4.56%
January 2023	\$	400.0	€	339.0	5.88%	4.58%
Unitymedia Hessen GmbH & Co. KG (Unitymedia Hessen), a subsidiary of Unitymedia:  January 2023	\$	2,450.0	€	1,799.0	5.62%	4.76%
•	Ψ	2,430.0	C	1,777.0	3.0270	4.7070
VTR:						
January 2022	\$	1,400.0	CLP	951,390.0	6.88%	6.36%

<sup>(</sup>a) Unlike the other cross-currency swaps presented in this table, the identified cross-currency swaps do not involve the exchange of notional amounts at the inception and maturity of the instruments. Accordingly, the only cash flows associated with these derivative instruments are interest payments and receipts.

Interest Rate Swaps:

The terms of our outstanding interest rate swap contracts at December 31, 2015 are as follows:

Subsidiary / Final maturity date	Notio	nal amount	Interest rate due from counterparty	Interest rate due to counterparty
	in	millions		
VMIH:				
October 2018	£	2,155.0	6 mo. GBP LIBOR	1.52%
October 2018 - June 2023	£	1,200.0	6 mo. GBP LIBOR	2.49%
January 2021	£	650.0	5.50%	6 mo. GBP LIBOR + 1.84%
January 2021	£	650.0	6 mo. GBP LIBOR + 1.84%	3.87%
April 2018	£	300.0	6 mo. GBP LIBOR	1.37%
UPC Broadband Holding:				
January 2022	\$	675.0	6.88%	6 mo. LIBOR + 4.90%
July 2020	€	750.0	6.38%	6 mo. EURIBOR + 3.16%
July 2016	€	503.4	6 mo. EURIBOR	0.20%
July 2016 - January 2021	€	250.0	6 mo. EURIBOR	2.52%
July 2016 - January 2023	€	210.0	6 mo. EURIBOR	2.88%
November 2021	€	107.0	6 mo. EURIBOR	2.89%
July 2016 - July 2020	€	43.4	6 mo. EURIBOR	3.95%
July 2016	CHF	900.0	6 mo. CHF LIBOR	0.05%
January 2022	CHF	711.5	6 mo. CHF LIBOR	1.89%
July 2016 - January 2021	CHF	500.0	6 mo. CHF LIBOR	1.65%
July 2016 - January 2018	CHF	400.0	6 mo. CHF LIBOR	2.51%
December 2016	CHF	370.9	6 mo. CHF LIBOR	3.82%
November 2019	CHF	226.8	6 mo. CHF LIBOR + 5.01%	6.88%

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Subsidiary / Final maturity date	No	tional amount	Interest rate due from counterparty	Interest rate due to counterparty
		in millions		
ABC B.V.:				
January 2022	€	1,566.0	6 mo. EURIBOR	1.66%
January 2016	€	689.0	1 mo. EURIBOR + 3.75%	6 mo. EURIBOR + 3.59%
January 2016 - January 2017	€	689.0	1 mo. EURIBOR + 3.75%	6 mo. EURIBOR + 3.57%
January 2021	€	500.0	6 mo. EURIBOR	2.61%
July 2016	€	461.3	6 mo. EURIBOR	0.20%
July 2016 - January 2023	€	290.0	6 mo. EURIBOR	2.84%
March 2021	€	175.0	6 mo. EURIBOR	2.32%
July 2016 - January 2022	€	171.3	6 mo. EURIBOR	3.44%
Telenet International Finance S.a.r.l ( <b>Telenet International</b> ), a subsidiary of Telenet:				
July 2017	€	800.0	3 mo. EURIBOR	(0.17)%
June 2023	€	500.0	3 mo. EURIBOR	0.42%
July 2017 - June 2022	€	420.0	3 mo. EURIBOR	2.08%
June 2021	€	400.0	3 mo. EURIBOR	0.41%
July 2017 - June 2023	€	382.0	3 mo. EURIBOR	1.89%
June 2022	€	55.0	3 mo. EURIBOR	1.81%
Liberty Puerto Rico:				
October 2016 - January 2022	\$	506.3	3 mo. LIBOR	2.49%
October 2016 - January 2019	\$	168.8	3 mo. LIBOR	1.96%

# Interest Rate Caps

Our purchased and sold interest rate cap contracts with respect to EURIBOR at December 31, 2015 are detailed below:

		December	31, 2015
Subsidiary / Final maturity date	Notional amount		EURIBOR cap rate
	in	millions	
Interest rate caps purchased (a):			
Liberty Global Europe Financing B.V. ( <b>LGE Financing</b> ), the immediate parent of UPC Holding:			
January 2020	€	735.0	7.00%
Telenet International:			
June 2017	€	50.0	4.50%
Telenet N.V., a subsidiary of Telenet:			
December 2017	€	0.5	6.50%
December 2017	€	0.5	5.50%
Interest rate cap sold (b):			
UPC Broadband Holding:			
January 2020	€	735.0	7.00%

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

- (a) Our purchased interest rate caps entitle us to receive payments from the counterparty when the relevant EURIBOR exceeds the EURIBOR cap rate during the specified observation periods.
- (b) Our sold interest rate cap requires that we make payments to the counterparty when the relevant EURIBOR exceeds the EURIBOR cap rate during the specified observation periods.

### Interest Rate Collars

Our interest rate collar contracts establish floor and cap rates with respect to EURIBOR on the indicated notional amounts at December 31, 2015, as detailed below:

		D	ecember 31, 201	5
Subsidiary / Final maturity date		otional mount	EURIBOR floor rate (a)	EURIBOR cap rate (b)
	in	millions		
UPC Broadband Holding:				
July 2016 - January 2020	€	1,135.0	1.00%	3.54%

- (a) We make payments to the counterparty when the relevant EURIBOR is less than the EURIBOR floor rate during the specified observation periods.
- (b) We receive payments from the counterparty when the relevant EURIBOR is greater than the EURIBOR cap rate during the specified observation periods.

### **Equity-related Derivative Instruments**

ITV Collar and Secured Borrowing. The ITV Collar is comprised of (i) purchased put options exercisable by Liberty Global Incorporated Limited (**Liberty Global Limited**), our wholly-owned subsidiary, and (ii) written call options exercisable by the counterparty. The ITV Collar effectively hedges the value of our investment in ITV shares from losses due to market price decreases below the put option price while retaining a portion of the gains from market price increases up to the call option price. For additional information regarding our investment in ITV, see note 6.

The ITV Collar and related agreements also provided Liberty Global Limited with the ability to effectively finance the purchase of its ITV shares pursuant to the ITV Collar Loan. In July 2014 and in connection with the Initial ITV Investment, Liberty Global Limited borrowed £446.9 million (\$764.5 million at the transaction date) under the ITV Collar Loan. In July 2015 and in connection with the Additional ITV Investment, Liberty Global Limited (i) modified the purchased put option and written call option strike prices within the ITV Collar and (ii) increased its borrowings under the ITV Collar Loan, resulting in net cash received of \$92.0 million. The amount received in connection with the Additional ITV Investment includes \$77.5 million of cash borrowings under the ITV Collar Loan that were not required to fund the Additional ITV Investment and \$14.5 million related to the ITV Collar Loan modifications. Immediately prior to the completion of these modifications, the fair value of the ITV Collar was a \$270.5 million liability. In connection with the ITV Collar modifications, this liability was effectively transferred on a non-cash basis to the principal amount of the ITV Collar Loan. At December 31, 2015, borrowings under the ITV Collar Loan were secured by all 398,515,510 of our ITV shares, which have been placed into a custody account. The ITV Collar Loan was issued at a discount with a zero coupon rate and has an average implied yield of 139 basis points (1.39%). The ITV Collar Loan, which has an average maturity of three years and contains no financial covenants, provides for customary representations and warranties, events of default and certain adjustment and termination events. Under the terms of the ITV Collar, the counterparty has the right to re-use the pledged ITV shares held in the custody account, but we have the right to recall the shares that are re-used by the counterparty subject to certain costs. In addition, the counterparty retains dividends on the ITV shares that the counterparty would need to borrow from the custody account to hedge its exposure under the ITV Collar (an estimated 390 million shares at December 31, 2015).

Sumitomo Collar and Secured Borrowing. The Sumitomo Collar is comprised of purchased put options exercisable by Liberty Programming Japan LLC (**Liberty Programming Japan**), our wholly-owned subsidiary, and written call options exercisable by

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

the counterparty with respect to all of the common shares of Sumitomo owned by Liberty Programming Japan. The Sumitomo Collar effectively hedges the value of our investment in Sumitomo shares from losses due to market price decreases below a per share value of \(\frac{\pmathbf{\frac{2}}}{2,118.50}\) (\(\frac{\pmathbf{\frac{5}}}{17.62}\)) while retaining gains from market price increases up to a per share value of \(\frac{\pmathbf{\frac{2}}}{2.787.50}\) (\(\frac{\pmathbf{2}}{23.19}\)). At December 31, 2015, the market price of Sumitomo common stock was \(\frac{\pmathbf{1}}{1,240.50}\) (\(\frac{\pmathbf{1}}{10.32}\)) per share. The Sumitomo Collar provides for a projected gross cash ordinary dividend to be paid per Sumitomo share during the term of the Sumitomo Collar. If the actual dividend paid does not exactly match the projected dividend, then an adjustment amount shall be payable between the parties to the Sumitomo Collar depending on the dividend actually paid by Sumitomo. The Sumitomo Collar may, at the option of Liberty Programming Japan, be settled in Sumitomo shares or in cash. The Sumitomo Collar also includes a purchased fair value put option, which effectively provides Liberty Programming Japan with the ability to sell the Sumitomo shares when the market price is trading between the put and call strike prices. The Sumitomo Collar matures in five equal semi-annual installments beginning on May 22, 2016. The fair value of the Sumitomo Collar as of December 31, 2015 was a net asset of \(\frac{\partial 345.6}{\partial million}\), of which \(\frac{\partial 120.6}{\partial million}\) is classified as current in our consolidated balance sheet.

The Sumitomo Collar and related agreements also provide Liberty Programming Japan with the ability to borrow funds on a secured basis. Borrowings under these agreements, which are secured by a pledge of 100% of the Sumitomo shares owned by Liberty Programming Japan, bear interest at 1.883% and mature in five equal semi-annual installments beginning on May 22, 2016, are included in our current and long-term debt and capital lease obligations in our consolidated balance sheets. During 2007, Liberty Programming Japan borrowed ¥93.660 billion (\$757.6 million at the transaction date) under these agreements (the **Sumitomo Collar Loan**). The pledge arrangement entered into by Liberty Programming Japan provides that Liberty Programming Japan will be able to exercise all voting and consensual rights and, subject to the terms of the Sumitomo Collar, receive dividends on the Sumitomo shares.

Lionsgate Forward and Secured Borrowing. The Lionsgate Forward has the economic equivalent of (i) purchased put options exercisable by Liberty Global Limited and (ii) written call options exercisable by the counterparty. The Lionsgate Forward effectively hedges the value of a portion of our investment in Lionsgate shares from losses due to market price decreases below the put option price while retaining a portion of the gains from market price increases up to the call option price. For additional information regarding our investment in Lionsgate, see note 6.

The Lionsgate Forward and related agreements also provided Liberty Global Limited with the ability to effectively finance a portion of the purchase of its Lionsgate shares pursuant to the Lionsgate Loan. In November 2015, Liberty Global Limited borrowed \$69.7 million under the Lionsgate Loan. At December 31, 2015, borrowings under the Lionsgate Loan were secured by 2.5 million of our Lionsgate shares, which have been placed into a custody account. The Lionsgate Loan was issued at a discount with a zero coupon rate and an average implied yield of 350 basis points (3.5%). The Lionsgate Loan, which has an average maturity of five years and contains no financial covenants, provides for customary representations and warranties, events of default and certain adjustment and termination events. Under the terms of the Lionsgate Forward, the counterparty does not have the right to re-use the pledged Lionsgate shares without permission from Liberty Global. In addition, Liberty Global Limited is obligated to share with the counterparty the economic benefit of any dividends paid during the term of the pledge based on a formula that takes into account a theoretical hedging position by the counterparty under the Lionsgate Forward (an estimated 1.7 million shares at December 31, 2015).

Ziggo Collar and Secured Borrowing. In July 2013, Liberty Global Limited paid a net option premium of €38.6 million (\$51.0 million at the transaction date) to enter into a share collar (the **Ziggo Collar**) and secured borrowing arrangement (the **Ziggo Collar Loan**) with respect to the then owned 24,957,000 Ziggo shares. The Ziggo Collar was comprised of (i) purchased put options exercisable by Liberty Global Limited and (ii) sold call options exercisable by the counterparty. Prior to the Ziggo Acquisition, the Ziggo Collar effectively hedged the value of a portion of our investment in Ziggo shares from significant losses due to market price decreases below the put option price while retaining a portion of the gains from market price increases up to the call option price.

The Ziggo Collar and related agreements also provided Liberty Global Limited with the ability to effectively finance the purchase of certain of its Ziggo shares pursuant to the Ziggo Collar Loan. In this regard, in July 2013, we borrowed €617.1 million (\$816.4 million at the transaction date) under the Ziggo Collar Loan, including €486.4 million (\$643.5 million at the transaction date) of non-cash borrowings that were used to finance the acquisition of Ziggo shares. Upon completion of the Ziggo Acquisition (see note 4), the Ziggo Collar was terminated and the Ziggo Collar Loan was settled.

Virgin Media Capped Calls. During 2010, Virgin Media entered into conversion hedges (the Virgin Media Capped Calls) in order to offset a portion of the dilutive effects associated with the exchange of certain exchangeable notes of Virgin Media. During

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

2013, and in connection with the exchange of certain exchangeable notes of Virgin Media, we settled 93.8% of the notional amount of the Virgin Media Capped Calls for cash proceeds of \$534.8 million.

### Foreign Currency Forwards

The following table summarizes our outstanding foreign currency forward contracts at December 31, 2015:

Subsidiary		Currency purchased forward	fo	urrency sold orward	Maturity dates
		in m	illions		
LGE Financing	\$	215.1	€	194.6	January 2016 - June 2016
LGE Financing	£	20.2	\$	30.7	January 2016 - May 2016
LGE Financing	£	23.0	€	31.2	January 2016
UPC Broadband Holding	\$	2.5	CZK	60.0	January 2016 - December 2016
UPC Broadband Holding	€	64.1	CHF	68.6	January 2016 - December 2016
UPC Broadband Holding	€	14.9	CZK	405.0	January 2016 - September 2016
UPC Broadband Holding	€	19.0	HUF	6,000.0	January 2016 - December 2016
UPC Broadband Holding	€	36.0	PLN	154.3	January 2016 - December 2016
UPC Broadband Holding	€	13.6	RON	61.6	January 2016 - March 2016
UPC Broadband Holding	£	3.6	€	4.9	January 2016 - December 2016
UPC Broadband Holding	СН	F 81.0	€	74.9	January 2016
UPC Broadband Holding	CZI	K 435.0	€	16.1	January 2016
UPC Broadband Holding	HU	F 6,600.0	€	21.1	January 2016
UPC Broadband Holding	PL	N 39.0	€	9.2	January 2016
Telenet N.V	\$	49.6	€	45.1	January 2016 - December 2016
VTR	\$	143.1	CLP	100,022.5	January 2016 - November 2016

### (8) Fair Value Measurements

We use the fair value method to account for (i) certain of our investments and (ii) our derivative instruments. The reported fair values of these investments and derivative instruments as of December 31, 2015 likely will not represent the value that will be paid or received upon the ultimate settlement or disposition of these assets and liabilities. In the case of the investments that we account for using the fair value method, the values we realize upon disposition will be dependent upon, among other factors, market conditions and the forecasted financial performance of the investees at the time of any such disposition. With respect to our derivative instruments, we expect that the values realized generally will be based on market conditions at the time of settlement, which may occur at the maturity of the derivative instrument or at the time of the repayment or refinancing of the underlying debt instrument.

GAAP provides for a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. Level 1 inputs are quoted market prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. Level 2 inputs are inputs other than quoted market prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for the asset or liability. We record transfers of assets or liabilities into or out of Levels 1, 2 or 3 at the beginning of the quarter during which the transfer occurred. During 2015, no such transfers were made.

All of our Level 2 inputs (interest rate futures, swap rates and certain of the inputs for our weighted average cost of capital calculations) and certain of our Level 3 inputs (forecasted volatilities and credit spreads) are obtained from pricing services. These inputs, or interpolations or extrapolations thereof, are used in our internal models to calculate, among other items, yield curves, forward interest and currency rates and weighted average cost of capital rates. In the normal course of business, we receive market value assessments from the counterparties to our derivative contracts. Although we compare these assessments to our internal

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

valuations and investigate unexpected differences, we do not otherwise rely on counterparty quotes to determine the fair values of our derivative instruments. The midpoints of applicable bid and ask ranges generally are used as inputs for our internal valuations.

For our investments in ITV, Sumitomo and Lionsgate, the recurring fair value measurements are based on the quoted closing price of the respective shares at each reporting date. Accordingly, the valuations of these investments fall under Level 1 of the fair value hierarchy. Our other investments that we account for at fair value are privately-held companies, and therefore, quoted market prices are unavailable. The valuation technique we use for such investments is a combination of an income approach (discounted cash flow model based on forecasts) and a market approach (market multiples of similar businesses). With the exception of certain inputs for our weighted average cost of capital calculations that are derived from pricing services, the inputs used to value these investments are based on unobservable inputs derived from our assumptions. Therefore, the valuation of our privately-held investments falls under Level 3 of the fair value hierarchy. Any reasonably foreseeable changes in assumed levels of unobservable inputs for the valuations of our Level 3 investments would not be expected to have a material impact on our financial position or results of operations.

The recurring fair value measurement of our equity-related derivative instruments are based on binomial option pricing models, which require the input of observable and unobservable variables such as exchange-traded equity prices, risk-free interest rates, dividend yields and forecasted volatilities of the underlying equity securities. The valuations of our equity-related derivative instruments are based on a combination of Level 1 inputs (exchange traded equity prices), Level 2 inputs (interest rate futures and swap rates) and Level 3 inputs (forecasted volatilities). As changes in volatilities could have a significant impact on the overall valuations, we have determined that these valuations fall under Level 3 of the fair value hierarchy. For the December 31, 2015 valuation of the ITV Collar, we used estimated volatilities ranging from 25.7% to 27.6%. At December 31, 2015, the valuations of the Sumitomo Collar, the Virgin Media Capped Calls and the Lionsgate Forward were not significantly impacted by forecasted volatilities.

As further described in note 7, we have entered into various derivative instruments to manage our interest rate and foreign currency exchange risk. The recurring fair value measurements of these derivative instruments are determined using discounted cash flow models. Most of the inputs to these discounted cash flow models consist of, or are derived from, observable Level 2 data for substantially the full term of these derivative instruments. This observable data includes most interest rate futures and swap rates, which are retrieved or derived from available market data. Although we may extrapolate or interpolate this data, we do not otherwise alter this data in performing our valuations. We incorporate a credit risk valuation adjustment in our fair value measurements to estimate the impact of both our own nonperformance risk and the nonperformance risk of our counterparties. Our and our counterparties' credit spreads represent our most significant Level 3 inputs, and these inputs are used to derive the credit risk valuation adjustments with respect to our various interest rate and foreign currency derivative valuations. As we would not expect changes in our or our counterparties' credit spreads to have a significant impact on the valuations of these derivative instruments, we have determined that these valuations fall under Level 2 of the fair value hierarchy. Our credit risk valuation adjustments with respect to our cross-currency and interest rate swaps are quantified and further explained in note 7.

Fair value measurements are also used in connection with nonrecurring valuations performed in connection with impairment assessments and acquisition accounting. These nonrecurring valuations include the valuation of reporting units, customer relationship intangible assets, property and equipment and the implied value of goodwill. The valuation of private reporting units is based at least in part on discounted cash flow analyses. With the exception of certain inputs for our weighted average cost of capital and discount rate calculations that are derived from pricing services, the inputs used in our discounted cash flow analyses, such as forecasts of future cash flows, are based on our assumptions. The valuation of customer relationships is primarily based on an excess earnings methodology, which is a form of a discounted cash flow analysis. The excess earnings methodology requires us to estimate the specific cash flows expected from the customer relationship, considering such factors as estimated customer life, the revenue expected to be generated over the life of the customer, contributory asset charges, and other factors. Tangible assets are typically valued using a replacement or reproduction cost approach, considering factors such as current prices of the same or similar equipment, the age of the equipment and economic obsolescence. The implied value of goodwill is determined by allocating the fair value of a reporting unit to all of the assets and liabilities of that unit as if the reporting unit had been acquired in a business combination, with the residual amount allocated to goodwill. All of our nonrecurring valuations use significant unobservable inputs and therefore fall under Level 3 of the fair value hierarchy. During 2015, 2014 and 2013, we performed nonrecurring valuations for the purpose of determining the acquisition accounting for the Choice Acquisition, the Ziggo Acquisition and the Virgin Media Acquisition, respectively. We used discount rates of 11.75%, 8.50% and 9.00%, respectively, for our valuations of the customer relationships acquired as a result of these acquisitions. For the Choice Acquisition, the discount rate used to value franchise marketing rights acquired as a result of this acquisition was approximately 12.25%.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

A summary of our assets and liabilities that are measured at fair value on a recurring basis is as follows:

						measurem · 31, 2015 u		
<b>Description</b>		December 31, 2015		Quoted prices in active markets for identical assets (Level 1)		gnificant other oservable inputs Level 2)	uno	gnificant bservable inputs Level 3)
				in mill	ions			
Assets:								
Derivative instruments:								
Cross-currency and interest rate derivative contracts	\$	2,085.6	\$	_	\$	2,085.6	\$	
Equity-related derivative instruments		408.5						408.5
Foreign currency forward contracts		10.4				10.4		
Other		1.6				1.6		
Total derivative instruments		2,506.1				2,097.6		408.5
Investments		2,591.8		2,257.2				334.6
Total assets	\$	5,097.9	\$	2,257.2	\$	2,097.6	\$	743.1
Liabilities - derivative instruments:								
Cross-currency and interest rate derivative contracts	\$	1,513.4	\$		\$	1,513.4	\$	_
Equity-related derivative instruments		74.4						74.4
Foreign currency forward contracts		1.1				1.1		
Other		5.7				5.7		
Total liabilities	\$	1,594.6	\$		\$	1,520.2	\$	74.4

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Fair value measurements

						e measuren er 31, 2014		
<b>Description</b>		December 31, 2014		oted prices in active arkets for ntical assets Level 1)	ob	gnificant other oservable inputs Level 2)	un	significant observable inputs (Level 3)
				in milli	ions			
Assets:								
Derivative instruments:								
Cross-currency and interest rate derivative contracts	\$	1,357.3	\$		\$	1,357.3	\$	_
Equity-related derivative instruments		400.2				_		400.2
Foreign currency forward contracts		2.5		_		2.5		
Other		1.4		_		1.4		
Total derivative instruments		1,761.4		_		1,361.2		400.2
Investments		1,662.7		1,344.3		_		318.4
Total assets	\$	3,424.1	\$	1,344.3	\$	1,361.2	\$	718.6
Liabilities - derivative instruments:								
Cross-currency and interest rate derivative contracts	\$	2,471.3	\$		\$	2,471.3	\$	
Equity-related derivative instruments		88.4				_		88.4
Foreign currency forward contracts		0.8		_		0.8		_
Other		0.3		_		0.3		_
Total liabilities	\$	2,560.8	\$	_	\$	2,472.4	\$	88.4

A reconciliation of the beginning and ending balances of our assets and liabilities measured at fair value on a recurring basis using significant unobservable, or Level 3, inputs is as follows:

Inv	vestments	d ins	erivative struments		Total
\$	318.4	\$	311.8	\$	630.2
			(227.7)		(227.7)
	(5.9)		_		(5.9)
			256.0		256.0
	22.1		(6.0)		16.1
\$	334.6	\$	334.1	\$	668.7
	\$	(5.9) ————————————————————————————————————	Investments   instance   instan	in millions  \$ 318.4 \$ 311.8	Investments   Iderivative instruments   In millions

<sup>(</sup>a) Most of these net losses relate to assets and liabilities that we continue to carry on our consolidated balance sheet as of December 31, 2015.

<sup>(</sup>b) On July 30, 2015, we modified the terms of the ITV Collar in connection with our acquisition of additional ITV shares. In connection with these modifications, we effectively transferred a liability associated with the ITV Collar to the ITV Collar Loan and received cash from the counterparty. For additional information regarding these adjustments, see note 7. For additional information regarding our investment in ITV, see note 6.

## Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

# (9) <u>Long-lived Assets</u>

### Property and Equipment, Net

The details of our property and equipment and the related accumulated depreciation are set forth below:

	Estimated useful	Decem	ber 31,
	life at December 31, 2015	2015	2014
		in mi	llions
Distribution systems:	3 to 30 years		
Liberty Global Group		\$ 24,447.2	\$ 24,985.6
LiLAC Group		1,037.8	1,026.9
Total		25,485.0	26,012.5
Customer premises equipment:	3 to 5 years		
Liberty Global Group		5,651.1	5,437.3
LiLAC Group		801.4	776.6
Total		6,452.5	6,213.9
Support equipment, buildings and land:	3 to 50 years		
Liberty Global Group		4,461.4	3,953.3
LiLAC Group		341.0	345.1
Total		4,802.4	4,298.4
Total property and equipment, gross:			
Liberty Global Group		34,559.7	34,376.2
LiLAC Group		2,180.2	2,148.6
Total		36,739.9	36,524.8
Accumulated depreciation:			
Liberty Global Group		(13,719.2)	(11,360.2)
LiLAC Group		(1,336.7)	(1,324.0)
Total		(15,055.9)	(12,684.2)
Total property and equipment, net:			
Liberty Global Group		20,840.5	23,016.0
LiLAC Group		843.5	824.6
Total		\$ 21,684.0	\$ 23,840.6

Depreciation expense of our continuing operations related to our property and equipment was \$4,501.4 million, \$4,401.6 million and \$3,499.6 million during 2015, 2014 and 2013, respectively. Depreciation expense of our discontinued operation related to our property and equipment was nil during 2015 and 2014 and \$11.5 million during 2013.

At December 31, 2015 and 2014, the amount of property and equipment, net, recorded under capital leases was \$1,262.5 million and \$1,580.8 million, respectively. Most of these amounts relate to assets included in our distribution systems category. Depreciation of assets under capital leases of our continuing operations is included in depreciation and amortization in our consolidated statements of operations.

During 2015, 2014 and 2013, we recorded non-cash increases related to vendor financing arrangements of \$1,481.5 million, \$975.3 million and \$573.5 million, respectively, which exclude related VAT of \$189.3 million, \$114.9 million and \$46.0 million, respectively, that were also financed by our vendors under these arrangements. In addition, during 2015, 2014 and 2013, we recorded non-cash increases to our property and equipment related to assets acquired under capital leases of \$106.1 million, \$127.2 million and \$143.0 million, respectively.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Most of our property and equipment is pledged as security under our various debt instruments. For additional information, see note 10.

During the fourth quarter of 2014, we recorded an impairment charge of \$68.7 million to reduce the carrying amount of certain of Ziggo's internal-use software assets to zero following our determination that these assets would have no future service potential for our combined operations in the Netherlands.

In May 2012, we began offering mobile services in Chile through a combination of our own wireless network and a third-party wireless access arrangement. During the second quarter of 2013, we began exploring strategic alternatives with respect to VTR's mobile operations, including alternatives that involved the use of expanded mobile virtual network operator (MVNO) arrangements. Effective April 1, 2013, we reduced the useful lives of certain of VTR's network equipment to reflect our then expectation that we would enter into a new MVNO arrangement and cease commercial use of VTR's mobile network during the fourth quarter of 2013. In September 2013, VTR (i) completed the process of migrating its mobile traffic to a third-party wireless network pursuant to its existing roaming agreement and (ii) ceased commercial use of its mobile network, which resulted in a further reduction in the useful lives of the aforementioned network equipment. As a result of these reductions in useful lives, VTR recognized aggregate incremental depreciation expense of \$98.3 million during 2013. In connection with the foregoing, we recorded restructuring charges totaling \$84.9 million during the third and fourth quarters of 2013. These restructuring charges include the fair value of (a) the remaining payments due under certain tower and real estate operating leases of \$71.5 million and (b) certain other required payments associated with VTR's mobile network. In December 2013, VTR amended its existing roaming agreement with an agreement that provides for a full MVNO relationship. For information regarding our restructuring charges, see note 14.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Foreign

### Goodwill

Changes in the carrying amount of our goodwill during 2015 are set forth below:

	J	anuary 1, 2015	8	Acquisitions and related djustments	tr ad	Foreign currency canslation ljustments and other	De	cember 31, 2015
				in mi	llions	s		
Liberty Global Group:								
European Operations Division:								
U.K./Ireland	\$	9,245.1	\$	58.7	\$	(513.1)	\$	8,790.7
The Netherlands		8,605.0		142.2		(895.9)		7,851.3
Germany		3,456.9		_		(352.5)		3,104.4
Belgium		1,978.9		_		(201.8)		1,777.1
Switzerland/Austria		3,591.9		_		(91.5)		3,500.4
Total Western Europe		26,877.8		200.9		(2,054.8)		25,023.9
Central and Eastern Europe		1,302.1		7.3		(122.5)		1,186.9
Total European Operations Division		28,179.9		208.2		(2,177.3)		26,210.8
Corporate and other		34.4		_		(0.4)		34.0
Total Liberty Global Group		28,214.3		208.2		(2,177.7)		26,244.8
LiLAC Group:								
LiLAC Division:								
Chile		440.3		_		(63.3)		377.0
Puerto Rico		226.1		51.6				277.7
Total LiLAC Division		666.4		51.6		(63.3)		654.7
Corporate and other (a)		120.9		_				120.9
Total LiLAC Group		787.3		51.6		(63.3)		775.6
Total	\$	29,001.6	\$	259.8	\$	(2,241.0)	\$	27,020.4

<sup>(</sup>a) Represents enterprise-level goodwill that is allocated to our Puerto Rico segment for purposes of our impairment tests.

If, among other factors, (i) our equity values were to decline significantly or (ii) the adverse impacts of economic, competitive, regulatory or other factors were to cause our results of operations or cash flows to be worse than anticipated, we could conclude in future periods that impairment charges are required in order to reduce the carrying values of our goodwill and, to a lesser extent, other long-lived assets. Any such impairment charges could be significant.

At December 31, 2015 and 2014 and based on exchange rates as of those dates, the accumulated goodwill impairments of our continuing operations were \$186.8 million and \$209.7 million, respectively. These amounts represent accumulated impairments related to our broadband communications operations in Romania, which operations are included within the European Operations Division's Central and Eastern Europe segment.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Changes in the carrying amount of our goodwill during 2014 are set forth below:

Liberty Global Group:           European Operations Division:           U.K./Ireland         \$ 9,844.2         \$ 2.1         \$ (601.2)         \$ 9,245.1           The Netherlands         1,260.4         7,724.3         (379.7)         8,605.0           Germany         3,939.4         —         (482.5)         3,456.9           Belgium         2,255.1         —         (276.2)         1,978.9           Switzerland/Austria         4,031.1         2.3         (441.5)         3,591.9           Total Western Europe         21,330.2         7,728.7         (2,181.1)         26,877.8           Central and Eastern Europe         1,520.1         8.3         (226.3)         1,302.1           Total European Operations Division         22,850.3         7,737.0         (2,407.4)         28,179.9           Corporate and other         43.0         —         (8.6)         34.4           Total Liberty Global Group         22,893.3         7,737.0         (2,416.0)         28,214.3           LiLAC Group:         5         —         (68.2)         440.3           LiLAC Division:         5         —         (68.2)         440.3           Puerto Rico         20         —		Ja	nnuary 1, 2014	an	quisitions d related justments	c tr ad	Foreign urrency anslation justments nd other	De	cember 31, 2014
European Operations Division:         U.K./Ireland       \$ 9,844.2       \$ 2.1       \$ (601.2)       \$ 9,245.1         The Netherlands       1,260.4       7,724.3       (379.7)       8,605.0         Germany       3,939.4       —       (482.5)       3,456.9         Belgium       2,255.1       —       (276.2)       1,978.9         Switzerland/Austria       4,031.1       2.3       (441.5)       3,591.9         Total Western Europe       21,330.2       7,728.7       (2,181.1)       26,877.8         Central and Eastern Europe       1,520.1       8.3       (226.3)       1,302.1         Total European Operations Division       22,850.3       7,737.0       (2,407.4)       28,179.9         Corporate and other       43.0       —       (8.6)       34.4         Total Liberty Global Group       22,893.3       7,737.0       (2,416.0)       28,214.3         LiLAC Group:       508.5       —       (68.2)       440.3         Puerto Rico       226.1       —       —       226.1         Total LiLAC Division       734.6       —       (68.2)       666.4         Corporate and other (a)       120.9       —       —       120.9					in mi	llions			
U.K./Ireland       \$ 9,844.2       \$ 2.1       \$ (601.2)       \$ 9,245.1         The Netherlands.       1,260.4       7,724.3       (379.7)       8,605.0         Germany       3,939.4       —       (482.5)       3,456.9         Belgium       2,255.1       —       (276.2)       1,978.9         Switzerland/Austria       4,031.1       2.3       (441.5)       3,591.9         Total Western Europe       21,330.2       7,728.7       (2,181.1)       26,877.8         Central and Eastern Europe       1,520.1       8.3       (226.3)       1,302.1         Total European Operations Division       22,850.3       7,737.0       (2,407.4)       28,179.9         Corporate and other       43.0       —       (8.6)       34.4         Total Liberty Global Group       22,893.3       7,737.0       (2,416.0)       28,214.3         LiLAC Division:       226.1       —       —       266.1         Chile       508.5       —       (68.2)       440.3         Puerto Rico       226.1       —       —       226.1         Total LiLAC Division       734.6       —       (68.2)       666.4         Corporate and other (a)       120.9       —	1								
The Netherlands       1,260.4       7,724.3       (379.7)       8,605.0         Germany       3,939.4       —       (482.5)       3,456.9         Belgium       2,255.1       —       (276.2)       1,978.9         Switzerland/Austria       4,031.1       2.3       (441.5)       3,591.9         Total Western Europe       21,330.2       7,728.7       (2,181.1)       26,877.8         Central and Eastern Europe       1,520.1       8.3       (226.3)       1,302.1         Total European Operations Division       22,850.3       7,737.0       (2,407.4)       28,179.9         Corporate and other       43.0       —       (8.6)       34.4         Total Liberty Global Group       22,893.3       7,737.0       (2,416.0)       28,214.3         LiLAC Group:         LiLAC Division:       508.5       —       (68.2)       440.3         Puerto Rico       226.1       —       —       226.1         Total LiLAC Division       734.6       —       (68.2)       666.4         Corporate and other (a)       120.9       —       —       120.9         Total LiLAC Group       855.5       —       (68.2)       787.3	European Operations Division:								
Germany       3,939.4       —       (482.5)       3,456.9         Belgium       2,255.1       —       (276.2)       1,978.9         Switzerland/Austria       4,031.1       2.3       (441.5)       3,591.9         Total Western Europe       21,330.2       7,728.7       (2,181.1)       26,877.8         Central and Eastern Europe       1,520.1       8.3       (226.3)       1,302.1         Total European Operations Division       22,850.3       7,737.0       (2,407.4)       28,179.9         Corporate and other       43.0       —       (8.6)       34.4         Total Liberty Global Group       22,893.3       7,737.0       (2,416.0)       28,214.3         LiLAC Group:       226.1       —       (68.2)       440.3         Puerto Rico       226.1       —       226.1         Total LiLAC Division       734.6       —       (68.2)       666.4         Corporate and other (a)       120.9       —       —       120.9         Total LiLAC Group       855.5       —       (68.2)       787.3	U.K./Ireland	\$	9,844.2	\$	2.1	\$	(601.2)	\$	9,245.1
Belgium       2,255.1       —       (276.2)       1,978.9         Switzerland/Austria       4,031.1       2.3       (441.5)       3,591.9         Total Western Europe       21,330.2       7,728.7       (2,181.1)       26,877.8         Central and Eastern Europe       1,520.1       8.3       (226.3)       1,302.1         Total European Operations Division       22,850.3       7,737.0       (2,407.4)       28,179.9         Corporate and other       43.0       —       (8.6)       34.4         Total Liberty Global Group       22,893.3       7,737.0       (2,416.0)       28,214.3         LiLAC Group:       LiLAC Division:       508.5       —       (68.2)       440.3         Puerto Rico       226.1       —       —       226.1         Total LiLAC Division       734.6       —       (68.2)       666.4         Corporate and other (a)       120.9       —       —       120.9         Total LiLAC Group       855.5       —       (68.2)       787.3	The Netherlands		1,260.4		7,724.3		(379.7)		8,605.0
Switzerland/Austria       4,031.1       2.3       (441.5)       3,591.9         Total Western Europe       21,330.2       7,728.7       (2,181.1)       26,877.8         Central and Eastern Europe       1,520.1       8.3       (226.3)       1,302.1         Total European Operations Division       22,850.3       7,737.0       (2,407.4)       28,179.9         Corporate and other       43.0       —       (8.6)       34.4         Total Liberty Global Group       22,893.3       7,737.0       (2,416.0)       28,214.3         LiLAC Group:         LiLAC Division:       508.5       —       (68.2)       440.3         Puerto Rico       226.1       —       —       226.1         Total LiLAC Division       734.6       —       (68.2)       666.4         Corporate and other (a)       120.9       —       —       120.9         Total LiLAC Group       855.5       —       (68.2)       787.3	Germany		3,939.4				(482.5)		3,456.9
Total Western Europe         21,330.2         7,728.7         (2,181.1)         26,877.8           Central and Eastern Europe         1,520.1         8.3         (226.3)         1,302.1           Total European Operations Division         22,850.3         7,737.0         (2,407.4)         28,179.9           Corporate and other         43.0         —         (8.6)         34.4           Total Liberty Global Group         22,893.3         7,737.0         (2,416.0)         28,214.3           LiLAC Group:         LiLAC Division:         Chile         —         (68.2)         440.3           Puerto Rico         226.1         —         —         226.1           Total LiLAC Division         734.6         —         (68.2)         666.4           Corporate and other (a)         120.9         —         —         120.9           Total LiLAC Group         855.5         —         (68.2)         787.3	Belgium		2,255.1				(276.2)		1,978.9
Central and Eastern Europe       1,520.1       8.3       (226.3)       1,302.1         Total European Operations Division       22,850.3       7,737.0       (2,407.4)       28,179.9         Corporate and other       43.0       —       (8.6)       34.4         Total Liberty Global Group       22,893.3       7,737.0       (2,416.0)       28,214.3         LiLAC Group:       LiLAC Division:       Chile       508.5       —       (68.2)       440.3         Puerto Rico       226.1       —       —       226.1         Total LiLAC Division       734.6       —       (68.2)       666.4         Corporate and other (a)       120.9       —       —       120.9         Total LiLAC Group       855.5       —       (68.2)       787.3	Switzerland/Austria		4,031.1		2.3		(441.5)		3,591.9
Total European Operations Division       22,850.3       7,737.0       (2,407.4)       28,179.9         Corporate and other       43.0       —       (8.6)       34.4         Total Liberty Global Group       22,893.3       7,737.0       (2,416.0)       28,214.3         LiLAC Group:       LiLAC Division:         Chile       508.5       —       (68.2)       440.3         Puerto Rico       226.1       —       226.1         Total LiLAC Division       734.6       —       (68.2)       666.4         Corporate and other (a)       120.9       —       —       120.9         Total LiLAC Group       855.5       —       (68.2)       787.3	Total Western Europe		21,330.2		7,728.7		(2,181.1)		26,877.8
Corporate and other       43.0       —       (8.6)       34.4         Total Liberty Global Group       22,893.3       7,737.0       (2,416.0)       28,214.3         LiLAC Group:       LiLAC Division:         Chile       508.5       —       (68.2)       440.3         Puerto Rico       226.1       —       —       226.1         Total LiLAC Division       734.6       —       (68.2)       666.4         Corporate and other (a)       120.9       —       —       120.9         Total LiLAC Group       855.5       —       (68.2)       787.3	Central and Eastern Europe		1,520.1		8.3		(226.3)		1,302.1
Total Liberty Global Group.       22,893.3       7,737.0       (2,416.0)       28,214.3         LiLAC Group:       LiLAC Division:         Chile       508.5       —       (68.2)       440.3         Puerto Rico       226.1       —       —       226.1         Total LiLAC Division       734.6       —       (68.2)       666.4         Corporate and other (a)       120.9       —       —       120.9         Total LiLAC Group       855.5       —       (68.2)       787.3	Total European Operations Division		22,850.3		7,737.0		(2,407.4)		28,179.9
LiLAC Group:       LiLAC Division:         Chile       508.5       — (68.2)       440.3         Puerto Rico       226.1       — — 226.1         Total LiLAC Division       734.6       — (68.2)       666.4         Corporate and other (a)       120.9       — — 120.9         Total LiLAC Group       855.5       — (68.2)       787.3	Corporate and other		43.0				(8.6)		34.4
LiLAC Division:       508.5       — (68.2)       440.3         Puerto Rico       226.1       — — 226.1         Total LiLAC Division       734.6       — (68.2)       666.4         Corporate and other (a)       120.9       — — 120.9         Total LiLAC Group       855.5       — (68.2)       787.3	Total Liberty Global Group		22,893.3		7,737.0		(2,416.0)		28,214.3
Chile       508.5       — (68.2)       440.3         Puerto Rico       226.1       — — 226.1         Total LiLAC Division       734.6       — (68.2)       666.4         Corporate and other (a)       120.9       — — 120.9         Total LiLAC Group       855.5       — (68.2)       787.3	LiLAC Group:								
Puerto Rico         226.1         —         —         226.1           Total LiLAC Division         734.6         —         (68.2)         666.4           Corporate and other (a)         120.9         —         —         120.9           Total LiLAC Group         855.5         —         (68.2)         787.3	LiLAC Division:								
Total LiLAC Division       734.6       — (68.2)       666.4         Corporate and other (a)       120.9       — — 120.9         Total LiLAC Group       855.5       — (68.2)       787.3	Chile		508.5		_		(68.2)		440.3
Corporate and other (a)       120.9       —       —       120.9         Total LiLAC Group       855.5       —       (68.2)       787.3	Puerto Rico		226.1						226.1
Total LiLAC Group	Total LiLAC Division		734.6				(68.2)		666.4
	Corporate and other (a)		120.9				_		120.9
Total	Total LiLAC Group		855.5				(68.2)		787.3
	Total	\$	23,748.8	\$	7,737.0	\$	(2,484.2)	\$	29,001.6

<sup>(</sup>a) Represents enterprise-level goodwill that is allocated to our Puerto Rico segment for purposes of our impairment tests.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

### Intangible Assets Subject to Amortization, Net

The details of our intangible assets subject to amortization are set forth below:

	Estimated	December 31, 2015				December 31, 2014						
_	useful life at December 31, 2015	Gross carrying amount		cumulated ortization		Net carrying amount	Gross carrying amount		cumulated ortization		Net arrying mount	
						in mi	llions					
Customer relationships:	4 to 15 years											
Liberty Global Group		\$10,285.3	\$	(3,410.7)	\$	6,874.6	\$12,052.5	\$	(3,037.0)	\$	9,015.5	
LiLAC Group		149.0		(31.7)		117.3	90.0		(19.3)		70.7	
Total		10,434.3		(3,442.4)		6,991.9	12,142.5		(3,056.3)		9,086.2	
Other:	2 to 15 years											
Liberty Global Group		205.3		(104.8)		100.5	234.8		(131.2)		103.6	
LiLAC Group		0.2		(0.1)		0.1	0.6		(0.6)			
Total		205.5		(104.9)		100.6	235.4		(131.8)		103.6	
Total intangible assets subjec amortization, net:	t to											
Liberty Global Group		10,490.6		(3,515.5)		6,975.1	12,287.3		(3,168.2)		9,119.1	
LiLAC Group		149.2		(31.8)		117.4	90.6		(19.9)		70.7	
Total		\$10,639.8	\$	(3,547.3)	\$	7,092.5	\$12,377.9	\$	(3,188.1)	\$	9,189.8	

In December 2013, Telenet's management determined that it would no longer be able to utilize its spectrum rights as a result of the conclusion of negotiations with network operators in Belgium and the absence of regulatory alternatives. This resulted in a triggering event with respect to the intangible asset related to Telenet's spectrum rights and, after performing an impairment analysis, Telenet recorded an impairment charge of \$73.0 million during the fourth quarter of 2013 to reduce the carrying amount of this intangible asset to zero.

Amortization expense related to intangible assets with finite useful lives of our continuing operations was \$1,324.4 million, \$1,098.5 million and \$776.8 million during 2015, 2014 and 2013, respectively. Amortization of intangible assets with finite useful lives of our discontinued operation was nil during 2015 and 2014, respectively, and \$17.6 million during 2013. Based on the amortizable intangible asset balances of our continuing operations at December 31, 2015, we expect that amortization expense will be as follows for the next five years and thereafter. The U.S. dollar equivalents of such amortization expense amounts as of December 31, 2015 are presented below (in millions):

2016	\$ 1,250.6
2017	1,138.5
2018	1,092.6
2019	1,052.8
2020	713.6
Thereafter	1,844.4
Total	\$ 7,092.5

### Other Indefinite-lived Intangible Assets

At December 31, 2015 and 2014, the franchise rights of Liberty Puerto Rico and other indefinite-lived intangible assets aggregating \$690.5 million and \$557.0 million, respectively, were included in other assets, net, in our consolidated balance sheets.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

# (10) <u>Debt and Capital Lease Obligations</u>

# Debt

The U.S. dollar equivalents of the components of our consolidated third-party debt are as follows:

	De	ecem	ber 31, 2	015								
	Weighted			orrowing	_	<b>Estimated</b>	fair '	value (c)		Carrying	val	ue (d)
	average interest	Ro	rrowing	ity (b) U.S. \$		Decen		, ,	_	Decem		
	rate (a)		rrency	equivaler	t _	2015		2014	_	2015		2014
						in	milli	ions				
Debt:												
Liberty Global Group:												
VM Notes	5.61 %			\$ -	- 5	\$ 10,594.1	\$	8,461.0	\$	10,582.6	\$	8,060.7
VM Credit Facility	3.73 %		(e)	777.	2	3,413.7		4,734.9		3,455.0		4,804.0
Ziggo Credit Facilities	3.64%	€	800.0	869.	3	5,161.0		4,663.0		5,222.5		4,710.8
Ziggo SPE Notes	4.47 %			_	-	1,582.7				1,703.9		
Ziggo Notes	6.82 %			_	_	955.1		1,082.3		960.1		1,077.0
Unitymedia Notes	5.00%			_	_	7,631.6		7,869.3		7,682.0		7,400.9
Unitymedia Revolving Credit Facilities	_	€	500.0	543.	3	_		319.4		_		338.8
UPCB SPE Notes	5.82 %			_	_	3,131.7		4,279.0		3,140.4		4,009.4
UPC Holding Senior Notes	6.59 %		_	_	_	1,601.4		2,603.6		1,486.7		2,391.6
UPC Broadband Holding Bank Facility	3.25 %	€	990.1	1,075.	3	1,284.3		3,156.4		1,302.4		3,179.2
Telenet SPE Notes	5.48 %			_	_	2,155.8		2,450.4		2,097.2		2,299.0
Telenet Credit Facility	3.41 %	€	381.0	414.	$\mathbf{C}$	1,443.0		1,633.4		1,471.8		1,638.6
ITV Collar Loan (f)	1.38 %			_	_	1,547.9		678.2		1,538.7		667.0
Sumitomo Collar Loan (f)	1.88%		_	_	_	805.6		818.0		787.6		787.7
Vendor financing (g)	3.30%			_	_	1,688.9		946.4		1,688.9		946.4
Other	7.35 %			_	_	395.0		350.2		280.8		228.3
Total Liberty Global Group	4.69%			3,679.	<b></b> 5	43,391.8		44,045.5	_	43,400.6		42,539.4
LiLAC Group:												
VTR Finance Senior Secured Notes	6.88%		_	_	_	1,301.1		1,439.4		1,400.0		1,400.0
VTR Credit Facility	_		(h)	191.	$\mathbf{C}$	_		_				_
Liberty Puerto Rico Bank Facility	5.11%	\$	40.0	40.	00	913.0		666.2		933.9		672.0
Total LiLAC Group	6.17%			231.	) -	2,214.1		2,105.6		2,333.9		2,072.0
Total third-party debt	4.77 %			\$ 3,910.	5 5	\$ 45,605.9	\$	46,151.1		45,734.5		44,611.4
Total capital lease obligations (	(i)									1,322.8		1,547.6
Total debt and capital lease of	bligations									47,057.3		46,159.0
Current maturities										(2,537.9)	_	(1,550.9)
Long-term debt and capital le	ase obligati	ons .							\$	44,519.4	\$	44,608.1

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

- (a) Represents the weighted average interest rate in effect at December 31, 2015 for all borrowings outstanding pursuant to each debt instrument, including any applicable margin. The interest rates presented represent stated rates and do not include the impact of derivative instruments, deferred financing costs, original issue premiums or discounts and commitment fees, all of which affect our overall cost of borrowing. Including the effects of derivative instruments, original issue premiums or discounts and commitment fees, but excluding the impact of financing costs, our weighted average interest rate on our aggregate variable- and fixed-rate indebtedness was 4.9% (including 4.8% for the Liberty Global Group and 6.0% for the LiLAC Group) at December 31, 2015. For information regarding our derivative instruments, see note 7.
- (b) Unused borrowing capacity represents the maximum availability under the applicable facility at December 31, 2015 without regard to covenant compliance calculations or other conditions precedent to borrowing. At December 31, 2015, based on the applicable leverage covenants, the full amount of unused borrowing capacity was available to be borrowed under each of the respective subsidiary facilities and there were no restrictions on the respective subsidiary's ability to make loans or distributions to other Liberty Global subsidiaries or Liberty Global, except as shown in the table below. In the following table, for each facility that is subject to limitations on borrowing availability, we present the actual borrowing availability under the respective facility and, for each subsidiary where the ability to make loans or distributions is limited, we present the amount that can be loaned or distributed to other Liberty Global subsidiaries or to Liberty Global. The amounts presented below assume no changes from December 31, 2015 borrowing levels and are based on the applicable covenant and other limitations in effect within each borrowing group at December 31, 2015, both before and after considering the impact of the completion of the December 31, 2015 compliance requirements.

			Li	mitation o	n ava	ilability		
		Decembe	r 31,	2015		Upon con evant Dece compliance requir	mber e repo	31, 2015 orting
		-				rrowing irrency		U.S. \$ uivalent
	December 31, 2015       Borrowing currency     U.S. \$ equivaler       in     • 570.2     \$ 619       € 435.2     \$ 472       € 716.4     \$ 778       € 216.3     \$ 235		in mi	llions				
Limitation on availability to be borrowed under:								
Ziggo Credit Facilities	€	570.2	\$	619.6	€	601.6	\$	653.7
Unitymedia Revolving Credit Facilities (1)	€	435.2	\$	472.9	€	500.0	\$	543.3
UPC Broadband Holding Bank Facility	€	716.4	\$	778.4	€	858.3	\$	932.6
Limitation on availability to be loaned or distributed by:								
Ziggo	€	216.3	\$	235.0	€	246.2	\$	267.5
Unitymedia (1)	€	17.7	\$	19.2	€	230.1	\$	250.0

- (1) Amounts include the impact of the 10% redemption of the 2022 UM Senior Secured Notes and the January 2023 5.125% UM Euro Senior Secured Notes (as defined and described below under *Unitymedia Notes*), which was completed in January 2016.
- (c) The estimated fair values of our debt instruments are determined using the average of applicable bid and ask prices (mostly Level 1 of the fair value hierarchy) or, when quoted market prices are unavailable or not considered indicative of fair value, discounted cash flow models (mostly Level 2 of the fair value hierarchy). The discount rates used in the cash flow models are based on the market interest rates and estimated credit spreads of the applicable entity, to the extent available, and other relevant factors. For additional information concerning fair value hierarchies, see note 8.
- (d) Amounts include the impact of premiums and discounts, where applicable.
- (e) The VM Revolving Facility (as defined and described under *VM Credit Facility* below) is a multi-currency revolving facility with maximum borrowing capacity equivalent to £675.0 million (\$994.5 million). The outstanding balance at December 31, 2015 was borrowed in euros.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

- (f) For information regarding the ITV Collar Loan and the Sumitomo Collar Loan, see note 7.
- (g) Represents amounts owed pursuant to interest-bearing vendor financing arrangements that are used to finance certain of our property and equipment additions, and to a lesser extent, certain of our operating expenses. These obligations are generally due within one year. At December 31, 2015 and 2014, the amounts owed pursuant to these arrangements include \$189.0 million and \$101.7 million, respectively, of VAT that was paid on our behalf by the vendor. Repayments of vendor financing obligations are included in repayments and repurchases of debt and capital lease obligations in our consolidated statements of cash flows.
- (h) The VTR Credit Facility is the senior secured credit facility of VTR and certain of its subsidiaries and comprises a \$160.0 million U.S. dollar facility (the VTR Dollar Credit Facility) and a CLP 22.0 billion (\$31.0 million) Chilean peso facility (the VTR Peso Credit Facility), each of which were undrawn at December 31, 2015. The VTR Dollar Credit Facility and the VTR Peso Credit Facility have fees on unused commitments of 1.1% and 1.34% per year, respectively. The interest rate for the VTR Dollar Credit Facility is LIBOR plus a margin of 2.75%. The interest rate for the VTR Peso Credit Facility is the applicable interbank offered rate for Chilean pesos in the relevant interbank market plus a margin of 3.35%. Borrowings under the VTR Dollar Credit Facility and the VTR Peso Credit Facility mature in January 2020 and January 2019, respectively.
- (i) The U.S. dollar equivalents of our consolidated capital lease obligations are as follows:

	Decem	ber 3	1,
	2015		2014
	in mi	llions	3
Liberty Global Group:			
Unitymedia (1)	\$ 703.1	\$	810.1
Telenet (2)	371.1		413.4
Virgin Media	159.5		255.3
Other subsidiaries	88.2		67.3
Total — Liberty Global Group	1,321.9		1,546.1
LiLAC Group:			
Liberty Puerto Rico	0.6		1.0
VTR	0.3		0.5
Total — LiLAC Group	0.9		1.5
Total	\$ 1,322.8	\$	1,547.6

December 21

- (1) Primarily represents Unitymedia's obligations under duct network lease agreements with Telekom Deutschland GmbH (**Deutsche Telekom**), an operating subsidiary of Deutsche Telekom AG, as the lessor. The original contracts were concluded in 2000 and 2001 and have indefinite terms, subject to certain mandatory statutory termination rights for either party after a term of 30 years. With certain limited exceptions, the lessor generally is not entitled to terminate these leases. For information regarding litigation involving these duct network lease agreements, see note 17.
- (2) At December 31, 2015 and 2014, Telenet's capital lease obligations included €329.3 million (\$357.8 million) and €328.6 million (\$357.1 million), respectively, associated with Telenet's lease of the broadband communications network of the four associations of municipalities in Belgium, which we refer to as the pure intercommunalues or the "PICs." All capital expenditures associated with the PICs network are initiated by Telenet, but are executed and financed by the PICs through additions to this lease that are repaid over a 15-year term. These amounts do not include Telenet's commitment related to certain operating costs associated with the PICs network. For additional information regarding this commitment, see note 17.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

### **General Information**

At December 31, 2015, all of our outstanding debt had been incurred by one of our seven "borrowing groups." These borrowing groups include the respective restricted parent and subsidiary entities within Virgin Media, Ziggo Group Holding, Unitymedia, UPC Holding, Telenet, VTR Finance and Liberty Puerto Rico.

*Credit Facilities.* Each of our borrowing groups has entered into one or more credit facility agreements with certain financial institutions. Each of these credit facilities contain certain covenants, the more notable of which are as follows:

- Our credit facilities contain certain consolidated net leverage ratios, as specified in the relevant credit facility, which are required to be complied with on an incurrence and/or maintenance basis;
- Our credit facilities contain certain restrictions which, among other things, restrict the ability of the members of the relevant borrowing group to (i) incur or guarantee certain financial indebtedness, (ii) make certain disposals and acquisitions, (iii) create certain security interests over their assets, in each case, subject to certain customary and agreed exceptions and (iv) make certain restricted payments to their direct and/or indirect parent companies (and indirectly to Liberty Global) through dividends, loans or other distributions, subject to compliance with applicable covenants;
- Our credit facilities require that certain members of the relevant borrowing group guarantee the payment of all sums payable under the relevant credit facility and such group members are required to grant first-ranking security over their shares or, in certain borrowing groups, over substantially all of their assets to secure the payment of all sums payable thereunder;
- In addition to certain mandatory prepayment events, the instructing group of lenders under the relevant credit facility may cancel the commitments thereunder and declare the loans thereunder due and payable after the applicable notice period following the occurrence of a change of control (as specified in the relevant credit facility);
- Our credit facilities contain certain customary events of default, the occurrence of which, subject to certain exceptions and materiality qualifications, would allow the instructing group of lenders to (i) cancel the total commitments, (ii) accelerate all outstanding loans and terminate their commitments thereunder and/or (iii) declare that all or part of the loans be payable on demand;
- Our credit facilities require members of the relevant borrowing group to observe certain affirmative and negative undertakings and covenants, which are subject to certain materiality qualifications and other customary and agreed exceptions; and
- In addition to customary default provisions, our credit facilities generally include certain cross-default and cross-acceleration provisions with respect to other indebtedness of members of the relevant borrowing group, subject to agreed minimum thresholds and other customary and agreed exceptions.

Senior and Senior Secured Notes. Certain of our borrowing groups have issued senior and/or senior secured notes. In general, our senior and senior secured notes (i) are senior obligations of each respective issuer within the relevant borrowing group that rank equally with all of the existing and future senior debt of such issuer and are senior to all existing and future subordinated debt of each respective issuer within the relevant borrowing group, (ii) contain, in most instances, certain guarantees from other members of the relevant borrowing group (as specified in the applicable indenture) and (iii) with respect to our senior secured notes, are secured by certain pledges or liens over the assets and/or shares of certain members of the relevant borrowing group. In addition, the indentures governing our senior and senior secured notes contain certain covenants, the more notable of which are as follows:

- Our notes contain certain customary incurrence-based covenants. In addition, our notes provide that any failure to pay principal prior to expiration of any applicable grace period, or any acceleration with respect to other indebtedness of the issuer or certain subsidiaries, over agreed minimum thresholds (as specified under the applicable indenture), is an event of default under the respective notes;
- Our notes contain certain restrictions which, among other things, restrict the ability of the members of the relevant borrowing group to (i) incur or guarantee certain financial indebtedness, (ii) make certain disposals and acquisitions, (iii)

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

create certain security interests over their assets, in each case, subject to certain customary and agreed exceptions and (iv) make certain restricted payments to its direct and/or indirect parent companies (and indirectly to Liberty Global) through dividends, loans or other distributions, subject to compliance with applicable covenants;

- If the relevant issuer or certain of its subsidiaries (as specified in the applicable indenture) sells certain assets, such issuer must offer to repurchase the applicable notes at par, or if a change of control (as specified in the applicable indenture) occurs, such issuer must offer to repurchase all of the relevant notes at a redemption price of 101%; and
- Our senior secured notes contain certain early redemption provisions including the ability to, during each 12-month period
  commencing on the issue date for such notes until the applicable call date, redeem up to 10% of the principal amount of
  the notes to be redeemed at a redemption price equal to 103% of the principal amount of the notes to be redeemed plus
  accrued and unpaid interest.

SPE Notes. From time to time, we create special purpose financing entities ("SPEs"), which are 100% owned by third parties, for the primary purpose of facilitating the offering of senior and senior secured notes, which we collectively refer to as the "SPE Notes." In this regard, SPE Notes have been issued, and are outstanding at December 31, 2015, by Ziggo Bond Finance B.V. (Ziggo Bond Finance) and Ziggo Secured Finance B.V. (Ziggo Secured Finance), collectively the "Ziggo SPEs", UPCB Finance IV Limited (UPCB Finance V) and UPCB Finance VI Limited (UPCB Finance VI), collectively the "UPCB SPEs", and Telenet Finance III Luxembourg S.C.A. (Telenet Finance III), Telenet Finance IV Luxembourg S.C.A. (Telenet Finance V) and Telenet Finance VI Luxembourg S.C.A. (Telenet Finance VI), collectively the "Telenet SPEs."

The SPEs used the proceeds from the issuance of SPE Notes to fund term loan facilities under their respective borrowing group (as further described below), each a "Funded Facility" and collectively the "Funded Facilities". Each SPE is dependent on payments from the relevant borrower under the applicable Funded Facility in order to service its payment obligations under each respective SPE Note. Although none of the respective borrowing entities under the Funded Facilities have any equity or voting interest in any of the relevant SPEs, each of the Funded Facility term loans creates a variable interest in the respective SPE for which the relevant borrowing entity is the primary beneficiary. As such, each borrowing entity under the relevant Funded Facility and its parent entities, including Liberty Global, are required to consolidate the relevant SPEs. As a result, the amounts outstanding under the Funded Facilities are eliminated in the respective borrowing group's and Liberty Global's consolidated financial statements.

Pursuant to the respective indentures for the SPE Notes (the SPE Indentures) and the respective accession agreements for the Funded Facilities, the call provisions, maturity and applicable interest rate for each Funded Facility are the same as those of the related SPE Notes. The SPEs, as lenders under the relevant credit facility for each respective borrowing group, are treated the same as the other lenders under the respective credit facility, with benefits, rights and protections similar to those afforded to the other lenders. Through the covenants in the applicable SPE Indentures and the applicable security interests over (i) all of the issued shares of the relevant SPE and (ii) the relevant SPE's rights under the applicable Funded Facility granted to secure the relevant SPE's obligations under the relevant SPE Notes, the holders of the SPE Notes are provided indirectly with the benefits, rights, protections and covenants granted to the SPEs as lenders under the respective credit facility. The SPEs are prohibited from incurring any additional indebtedness, subject to certain exceptions under the SPE Indentures.

# LIBERTY GLOBAL PLC Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

VM Notes

The details of the outstanding notes of Virgin Media as of December 31, 2015 are summarized in the following table:

			O	riginal	_	Outstandir amo	g pr ount	incipal			
VM Notes	Maturity	Interest rate		issue mount		orrowing urrency		U.S. \$ uivalent	Estimated fair value		arrying alue (a)
							in	millions			
VM Senior Notes (b):											
2022 VM Senior Notes:											
2022 VM 4.875% Dollar Senior Notes	February 15, 2022	4.875%	\$	118.7	\$	118.7	\$	118.7	\$ 108.1	\$	119.4
2022 VM 5.25% Dollar Senior Notes	February 15, 2022	5.250%	\$	95.0	\$	95.0		95.0	88.4		95.7
2022 VM Sterling Senior Notes	February 15, 2022	5.125%	£	44.1	£	44.1		65.0	63.6		65.4
2023 VM Senior Notes:											
2023 VM Dollar Senior Notes	April 15, 2023	6.375%	\$	530.0	\$	530.0		530.0	539.9		530.0
2023 VM Sterling Senior Notes	April 15, 2023	7.000%	£	250.0	£	250.0		368.4	388.1		368.4
2024 VM Senior Notes:											
2024 VM Dollar Senior Notes	October 15, 2024	6.000%	\$	500.0	\$	500.0		500.0	498.4		500.0
2024 VM Sterling Senior Notes	October 15, 2024	6.375%	£	300.0	£	300.0		442.0	448.9		442.0
2025 VM Senior Notes:											
2025 VM Euro Senior Notes	January 15, 2025	4.500%	€	460.0	€	460.0		499.8	476.4		499.8
2025 VM Dollar Senior Notes	January 15, 2025	5.750%	\$	400.0	\$	400.0		400.0	389.3		400.0
VM Senior Secured Notes (c):											
January 2021 VM Senior Secured Notes:											
January 2021 VM Sterling Senior Secured Notes	January 15, 2021	5.500%	£	628.4	£	628.4		925.9	984.9		936.2
January 2021 VM Dollar Senior Secured Notes	January 15, 2021	5.250%	\$	447.9	\$	447.9		447.9	472.5		458.0
April 2021 VM Senior Secured Notes:											
April 2021 VM Sterling Senior Secured Notes	April 15, 2021	6.000%	£	1,100.0	£	990.0		1,458.7	1,515.1		1,458.7
April 2021 VM Dollar Senior Secured Notes	April 15, 2021	5.375%	\$	1,000.0	\$	900.0		900.0	932.6		900.0
2025 VM Senior Secured Notes:											
2025 VM 5.5% Sterling Senior Secured Notes	January 15, 2025	5.500%	£	430.0	£	387.0		570.2	560.6		570.2
2025 VM 5.125% Sterling Senior Secured Notes	January 15, 2025	5.125%	£	300.0	£	300.0		442.0	423.5		442.0
2025 VM Dollar Senior Secured Notes	January 15, 2025	5.500%	\$	425.0	\$	425.0		425.0	425.5		425.0
2026 VM Senior Secured Notes	January 15, 2026	5.250%	\$	1,000.0	\$	1,000.0		1,000.0	971.9		1,004.8
2027 VM Senior Secured Notes	January 15, 2027	4.875%	£	525.0	£	525.0		773.5	712.6		773.5
2029 VM Senior Secured Notes	March 28, 2029	6.250%	£	400.0	£	400.0		589.4	593.8		593.5
Total			•••••				\$	10,551.5	\$ 10,594.1	\$1	0,582.6

### Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

- (a) Amounts include the impact of premiums, where applicable, including amounts recorded in connection with the acquisition accounting for Virgin Media.
- (b) The VM Senior Notes were issued by Virgin Media Finance PLC (**Virgin Media Finance**), a wholly-owned subsidiary of Virgin Media.
- (c) The VM Senior Secured Notes were issued by Virgin Media Secured Finance PLC (Virgin Media Secured Finance), a wholly-owned subsidiary of Virgin Media.

Subject to the circumstances described below, the VM Notes are non-callable prior to the applicable call date (VM Call Date) as presented in the below table. At any time prior to the respective VM Call Date, Virgin Media Secured Finance or Virgin Media Finance may redeem some or all of the applicable notes by paying a "make-whole" premium, which is the present value of all remaining scheduled interest payments to the applicable VM Call Date using the discount rate (as specified in the applicable indenture) as of the redemption date plus 50 basis points (25 basis points in the case of the January 2021 VM Senior Secured Notes).

VM Notes	VM Call Date
2022 VM Senior Notes	(a)
2023 VM Senior Notes	April 15, 2018
2024 VM Senior Notes	October 15, 2019
2025 VM Senior Notes	January 15, 2020
January 2021 VM Senior Secured Notes	(a)
April 2021 VM Senior Secured Notes	April 15, 2017
2025 VM 5.5% Sterling Senior Secured Notes	January 15, 2019
2025 VM Dollar Senior Secured Notes	January 15, 2019
2025 VM 5.125% Sterling Senior Secured Notes	January 15, 2020
2026 VM Senior Secured Notes	January 15, 2020
2027 VM Senior Secured Notes	January 15, 2021
2029 VM Senior Secured Notes	January 15, 2021

<sup>(</sup>a) The 2022 VM Senior Notes and the January 2021 VM Senior Secured Notes are non-callable. At any time prior to maturity, some or all of these notes may be redeemed by paying a "make-whole" premium, which is the present value of all remaining scheduled interest payments to the respective maturity date.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Virgin Media Finance or Virgin Media Secured Finance (as applicable) may redeem some or all of the VM Senior Notes and the VM Senior Secured Notes (with the exception of the 2022 VM Senior Notes and the January 2021 VM Senior Secured Notes) at the following redemption prices (expressed as a percentage of the principal amount) plus accrued and unpaid interest and additional amounts (as specified in the applicable indenture), if any, to the applicable redemption date, as set forth below:

				R	edemption	ı price		
		2023 VM Dollar Senior Notes	2023 VM Sterling Senior Not	Dollar S	Senior	2024 VM Sterling Senior Notes	2025 VM Dollar Senior Notes	2025 VM Euro Senior Notes
12-month period comr	mencing	April 15	April 15	Octobe	er 15	October 15	January 15	January 15
2016		N.A.	N.A.	N.A	۸.	N.A.	N.A	N.A
2017		N.A.	N.A.	N.A	۸.	N.A.	N.A	N.A
2018		103.188%	103.500%	% N.A	۸.	N.A.	N.A	N.A
2019		102.125%	102.333%	6 103.00	00%	103.188%	N.A	N.A
2020		101.063%	101.667%	6 102.00	00%	102.125%	102.875%	102.250%
2021		100.000%	100.000%	6 101.00	00%	101.063%	101.917%	101.500%
2022		100.000%	100.000%	6 100.00	00%	100.000%	100.958%	100.750%
2023		N.A.	N.A.	100.00	00%	100.000%	100.000%	100.000%
2024 and thereafter		N.A.	N.A.	N.A	۸.	N.A.	100.000%	100.000%
				Redemp	tion price			
	April 2021 VM Dollar Senior Secured Notes	April 2021 VM Sterling Senior Secured Notes	2025 VM 5.5% Sterling Senior Secured Notes	2025 VM Dollar Senior Secured Notes	2025 V 5.125% Sterlin Senio Secure Notes	dg 2026 V r Senio ed Secur	or Senior ed Secured	2029 VM Senior Secured Notes
12-month period commencing	April 15	April 15	January 15	January 15	January	15 January	15 January 1	5 January 15
2016	N.A.	N.A.	N.A.	N.A.	N.A.	N.A	. N.A.	N.A.
2017	102.688%	103.000%	N.A.	N.A.	N.A.	N.A	. N.A.	N.A.
2018	101.344%	101.500%	N.A.	N.A.	N.A.	N.A	. N.A.	N.A.
2019	100.000%	100.000%	102.750%	102.750%	N.A.	N.A	. N.A.	N.A.
2020	100.000%	100.000%	101.833%	101.833%	102.563	3% 102.62	5% N.A.	N.A.
2021	N.A.	N.A.	100.000%	100.000%	101.708	3% 101.31	3% 102.438%	6 103.125%
2022	N.A.	N.A.	100.000%	100.000%	100.854	100.65	6% 101.219%	6 102.083%
2023	N.A.	N.A.	100.000%	100.000%	100.000	0% 100.00	0% 100.609%	6 101.042%
2024 and thereafter	N.A.	N.A.	100.000%	100.000%	100.000	0% 100.00	0% 100.000%	6 100.000%

2015 Refinancing Transactions. On January 28, 2015, in connection with the UPC Ireland Transfer (as defined and described under UPC Broadband Holding Bank Facility — 2015 Transactions below), (i) Virgin Media Secured Finance issued the 2025 VM 5.125% Senior Secured Notes and (ii) Virgin Media Finance issued the 2025 VM Senior Notes. A portion of the proceeds from the 2025 VM 5.125% Senior Secured Notes and the 2025 VM Senior Notes were ultimately used to redeem certain amounts outstanding under the UPC Holding Senior Notes and the UPCB SPE Notes, each as defined and described below.

On March 30, 2015, Virgin Media Secured Finance issued (i) \$500.0 million principal amount of 5.25% senior secured notes due January 15, 2026 (the **Original 2026 VM Senior Secured Notes**) and (ii) the 2027 VM Senior Secured Notes. On April 30, 2015, Virgin Media Secured Finance issued \$500.0 million principal amount of 5.25% senior secured notes due January 15, 2026 (the **Additional 2026 VM Senior Secured Notes** and, together with the Original 2026 VM Senior Secured Notes, the **2026 VM Senior Secured Notes**). The Additional 2026 VM Senior Secured Notes were issued at 101% of par. The net proceeds from the

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

2026 VM Senior Secured Notes and the 2027 VM Senior Secured Notes were used to (a) redeem 10% of the principal amount of each of the following: (1) the April 2021 VM Sterling Senior Secured Notes, (2) the April 2021 VM Dollar Senior Secured Notes and (3) the 2025 VM 5.5% Sterling Senior Secured Notes, each at a redemption price equal to 103% of the applicable redeemed principal amount in accordance with the indentures governing each of the notes, (b) prepay in full the £375.0 million (\$552.5 million) outstanding principal amount of term loan A under the VM Credit Facility (as defined and described below) and (c) prepay \$900.0 million of the then existing \$2,755.0 million outstanding principal amount of term loan B (VM Facility B) under the VM Credit Facility, and roll the remaining outstanding term loans under VM Facility B into a new term loan VM Facility F (as described below). In connection with these transactions, we recognized a loss on debt modification and extinguishment, net, of \$44.3 million. This loss includes (I) the write-off of \$28.6 million of deferred financing costs, (II) the payment of \$10.7 million of redemption premium, (III) the write-off of \$4.2 million of unamortized discount and (IV) the payment of \$0.8 million of third-party costs.

2014 Refinancing Transactions. During 2014, we completed a number of refinancing transactions that generally resulted in lower interest rates and extended maturities. In connection with these transactions, we recognized a gain on debt modification and extinguishment, net, of \$32.3 million. This gain includes (i) the write-off of \$170.9 million of unamortized premium, (ii) the payment of \$123.0 million of redemption premium and (iii) the write-off of \$15.6 million of deferred financing costs.

### VM Credit Facility

The VM Credit Facility is the senior secured credit facility of certain subsidiaries of Virgin Media. The details of our borrowings under the VM Credit Facility as of December 31, 2015 are summarized in the following table:

VM Facility	Maturity		Maturity Interest rate			ility amount borrowing currency)	bo	nused rrowing apacity	Carrying value (a)
					in mi	llions			
D	June 30, 2022	LIBOR + 3.25% (b)	£	100.0	\$	_	\$ 147.0		
E	June 30, 2023	LIBOR $+ 3.50\%$ (b)	£	849.4			1,248.8		
F	June 30, 2023	LIBOR $+ 2.75\%$ (b)	\$	1,855.0			1,841.9		
VM Revolving Facility (c)	December 31, 2021	LIBOR + 2.75%		(d)		777.2	217.3		
Total					\$	777.2	\$ 3,455.0		

- (a) The carrying values of VM Facilities D, E and F include the impact of discounts.
- (b) VM Facilities D, E and F each have a LIBOR floor of 0.75%.
- (c) The VM Revolving Facility has a fee on unused commitments of 1.1% per year.
- (d) The VM Revolving Facility is a multi-currency revolving facility with maximum borrowing capacity equivalent to £675.0 million (\$994.5 million). The outstanding balance at December 31, 2015 was borrowed in euros.

2015 Refinancing Transactions. In June 2015, (i) the then outstanding \$1,855.0 million of commitments under the existing VM Facility B were effectively rolled into a new dollar denominated term loan (VM Facility F) and (ii) we amended the terms of our VM Revolving Facility to extend the maturity to December 31, 2021, reduce the margin from 3.25% to 2.75% and increase the commitments by £15.0 million (\$22.1 million).

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

### Ziggo Credit Facilities

The Ziggo Credit Facilities are the senior secured credit facilities of certain subsidiaries of Ziggo Group Holding. The details of our borrowings under the Ziggo Credit Facilities as of December 31, 2015 are summarized in the following table:

Ziggo Credit Facility	Maturity	Interest rate	(in	lity amount borrowing rrency) (a)	bo	Inused rrowing acity (b)	Carrying value (c)
				in mi	llions		
Ziggo Dollar Facility	January 15, 2022	LIBOR + 2.75% (d)	\$	2,350.0	\$	_	\$ 2,319.7
Ziggo Euro Facility	January 15, 2022	EURIBOR + 3.00% (e)	€	2,000.0			2,153.9
Ziggo Proceeds Loans:	-						
Ziggo Senior Secured Proceeds Loan (f)	January 15, 2025	3.750%	€	800.0		_	869.3
Ziggo Senior Proceeds Loans:							
Ziggo Euro Senior Proceeds Loan (f)	January 15, 2025	4.625%	€	400.0		_	434.6
Ziggo Dollar Senior Proceeds Loan (f)	January 15, 2025	5.875%	\$	400.0		_	400.0
New Ziggo Credit Facility	March 31, 2021	EURIBOR $+ 3.75\%$	€	689.2			748.9
Ziggo Revolving Facilities	June 30, 2020	(g)	€	800.0		869.3	_
Elimination of the Ziggo Proceeds	Loans in consolidati	on					(1,703.9)
Total					\$	869.3	\$ 5,222.5

- (a) Except as described in (f) below, amounts represent total third-party facility amounts at December 31, 2015.
- (b) At December 31, 2015, our availability under the Ziggo Credit Facilities was limited to €570.2 million (\$619.6 million). When the relevant December 31, 2015 compliance reporting requirements have been completed, and assuming no changes from December 31, 2015 borrowing levels, we anticipate that our availability under the Ziggo Credit Facilities will be limited to €601.6 million (\$653.7 million).
- (c) The carrying values of the Ziggo Dollar Facility and the Ziggo Euro Facility include the impact of discounts.
- (d) The Ziggo Dollar Facility has a LIBOR floor of 0.75%.
- (e) The Ziggo Euro Facility has a EURIBOR floor of 0.75%.
- (f) As further discussed in the below description of the Ziggo SPE Notes, the amounts outstanding under the Ziggo Senior Secured Proceeds Loan, the Ziggo Euro Senior Proceeds Loan and the Ziggo Dollar Senior Proceeds Loan are eliminated in Liberty Global's consolidated financial statements.
- (g) The Ziggo Revolving Facilities include (i) a €750.0 million (\$815.0 million) facility that bears interest at EURIBOR plus a margin of 2.75% and has a fee on unused commitments of 1.1% per year and (ii) a €50.0 million (\$54.3 million) facility that bears interest at EURIBOR plus a margin of 2.00% and has a fee on unused commitments of 0.8% per year.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

### Ziggo SPE Notes

The details of the Ziggo SPE Notes as of December 31, 2015 are summarized in the following table:

			Outstanding principal amount							
Ziggo SPE Notes	Maturity Interest rate		Borrowing currency		U.S. \$ equivalent		Estimated fair value		-	Carrying value
						in mi	illio	ns		
Ziggo 2025 Senior Secured Notes	January 15, 2025	3.750%	€	800.0	\$	869.3	\$	805.2	\$	869.3
Ziggo 2025 Senior Notes:										
Ziggo 2025 Euro Senior Notes	January 15, 2025	4.625%	€	400.0		434.6		405.0		434.6
Ziggo 2025 Dollar Senior Notes	January 15, 2025	5.875%	\$	400.0		400.0		372.5		400.0
Total					\$	1,703.9	\$	1,582.7	\$	1,703.9

Outstanding principal

Subject to the circumstances described below, the Ziggo SPE Notes are non-callable until January 15, 2020. If, however, at any time prior to January 15, 2020, all or a portion of the loans under the related Ziggo Proceeds Loans are voluntarily prepaid (a **Ziggo Early Redemption Event**), then the applicable Ziggo SPE will be required to redeem an aggregate principal amount of its Ziggo SPE Notes equal to the aggregate principal amount of the loans so prepaid under the relevant Ziggo Proceeds Loan. In general, the redemption price payable will equal 100% of the principal amount of the applicable Ziggo SPE Notes to be redeemed and a "make-whole" premium, which is the present value of all remaining scheduled interest payments to the first call date using the discount rate (as specified in the applicable indenture) as of the redemption date plus 50 basis points.

Upon the occurrence of a Ziggo Early Redemption Event on or after January 15, 2020, the applicable Ziggo SPE will redeem an aggregate principal amount of its Ziggo SPE Notes equal to the principal amount of the related Ziggo Proceeds Loans prepaid at the following redemption prices (expressed as a percentage of the principal amount), plus accrued and unpaid interest and additional amounts (as specified in the applicable indenture), if any, to the redemption date, as set forth below:

	Redemption price					
	Ziggo 2025 Dollar Senior Notes	Ziggo 2025 Euro Senior Notes	Ziggo 2025 Senior Secured Notes			
12-month period commencing January 15:						
2020	102.938%	102.313%	101.875%			
2021	101.958%	101.542%	101.250%			
2022	100.979%	100.771%	100.625%			
2023 and thereafter	100.000%	100.000%	100.000%			

2015 Refinancing Transactions. On January 29, 2015, Ziggo Bond Finance issued (i) the Ziggo 2025 Dollar Senior Notes and (ii) the Ziggo 2025 Euro Senior Notes, the proceeds of which were used to fund the Ziggo Senior Proceeds Loans, with UPC Nederland Holding I B.V. as the borrower.

On February 4, 2015, Ziggo Secured Finance issued the Ziggo 2025 Senior Secured Notes and used such proceeds to fund the Ziggo Senior Secured Proceeds Loan, with UPC Nederland Holding III B.V. as the borrower.

In connection with the Ziggo Services Transfer (as defined and described under *UPC Broadband Holding Bank Facility*—2015 Transactions below), the proceeds from the Ziggo Proceeds Loans were ultimately used to redeem certain amounts outstanding under the UPC Holding Senior Notes and the UPCB SPE Notes, each as defined and described below.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

### Ziggo Notes

The details of the Ziggo Notes as of December 31, 2015 are summarized in the following table:

			O	utstandin amo	•	incipal				
Ziggo Notes	Maturity	Interest rate			U.S. \$ equivalent		Estimated fair value		Carrying value (a)	
						in mi	llion	S		
Ziggo 2020 Euro Senior Secured Notes (b)	March 27, 2020	3.625%	€	71.7	\$	77.9	\$	77.5	\$	79.8
Ziggo 2024 Euro Senior Notes (c)	May 15, 2024	7.125%	€	743.1		807.5		877.6		880.3
Total					\$	885.4	\$	955.1	\$	960.1

- (a) Amounts include the impact of premiums.
- (b) The Ziggo 2020 Euro Senior Secured Notes were issued by Ziggo B.V., a wholly-owned subsidiary of Ziggo Bond Company B.V. (**Ziggo Bondco**), which is a wholly-owned subsidiary of Ziggo Group Holding.
- (c) The Ziggo 2024 Euro Senior Notes were issued by Ziggo Bondco.

The Ziggo 2024 Euro Senior Notes are non-callable until May 15, 2019. At any time prior to May 15, 2019, Ziggo Bondco may redeem some or all of the Ziggo 2024 Euro Senior Notes by paying a "make-whole" premium. Ziggo Bondco may redeem some or all of the Ziggo 2024 Euro Senior Notes at the following redemption prices (expressed as a percentage of the principal amount) plus accrued and unpaid interest and additional amounts (as specified in the applicable indenture), if any, to the redemption date, as set forth below:

	Redemption price
12-month period commencing May 15:	
2019	103.563%
2020	102.375%
2021	101.188%
2022 and thereafter	100.000%

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

### Unitymedia Notes

The details of the Unitymedia Notes as of December 31, 2015 are summarized in the following table:

							Outstanding principal amount						
Unitymedia Notes	Maturity	Interest		Original issue amount		Borrowing currency		U.S. \$ equivalent		Estimated fair value		Carrying value	
								in mil	lions				
UM Senior Notes (a):													
2025 UM Senior Notes	January 15, 2025	6.125%	\$	900.0	\$	900.0	\$	900.0	\$	893.8	\$	900.0	
2027 UM Senior Notes	January 15, 2027	3.750%	€	700.0	€	700.0		760.6		657.0		760.6	
UM Senior Secured Notes (b):													
2022 UM Senior Secured	September 15, 2022	5.500%	£	650.0	€	585.0		635.7		675.4		635.7	
Notes  January 2023 UM Senior Secured Notes:	September 13, 2022	3.300 /0	C	030.0	C	363.0		033.7		073.4		033.7	
January 2023 UM Dollar Senior Secured Notes	January 15, 2023	5.500%	\$1,	,000.0	\$	1,000.0		1,000.0		996.3	1	,000.0	
January 2023 5.75% UM Euro Senior Secured Notes January 2023 5.125%	January 15, 2023	5.750%	€	500.0	€	405.0		440.1		467.6		440.1	
UM Euro Senior Secured Notes	January 21, 2023	5.125 %	€	500.0	€	450.0		489.0		513.7		489.0	
April 2023 UM Senior Secured Notes	April 15, 2023	5.625%	€	350.0	€	280.0		304.2		322.7		304.2	
2025 UM Senior Secured Notes:													
2025 UM Euro Senior Secured Notes	January 15, 2025	4.000%	€1,	,000.0	€	1,000.0		1,086.6	1,	,050.6	1	,086.6	
2025 UM Dollar Senior Secured Notes	January 15, 2025	5.000 %	\$	550.0	\$	550.0		550.0		529.0		550.0	
2026 UM Senior Secured Notes	February 15, 2026	4.625 %	€	420.0	€	420.0		456.4		455.5		456.4	
2027 UM Senior Secured Notes	January 15, 2027	3.500 %	€	500.0	€	500.0		543.3		502.9		543.3	
2029 UM Senior Secured Notes	January 15, 2029	6.250 %	€	475.0	€	475.0		516.1		567.1		516.1	
Total					• • • • • • •		\$	7,682.0	\$ 7,	631.6	\$7	7,682.0	

<sup>(</sup>a) The UM Senior Notes were issued by Unitymedia.

Subject to the circumstances described below, the Unitymedia Notes are non-callable prior to the applicable call date (UM Call Date) as presented in the below table. At any time prior to the respective UM Call Date, Unitymedia or the UM Senior Secured Notes Issuers may redeem some or all of the applicable notes by paying a "make-whole" premium, which is the present value of all remaining scheduled interest payments to the applicable UM Call Date using the discount rate (as specified in the applicable indenture) as of the redemption date plus 50 basis points.

<sup>(</sup>b) The UM Senior Secured Notes were issued by Unitymedia Hessen and Unitymedia NRW GmbH, each a subsidiary of Unitymedia (together, the **UM Senior Secured Notes Issuers**).

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Unitymedia Notes	UM Call Date
2025 UM Senior Notes	January 15, 2020
2027 UM Senior Notes	January 15, 2021
2022 UM Senior Secured Notes	September 15, 2017
January 2023 UM Dollar Senior Secured Notes	January 15, 2018
January 2023 5.75% UM Euro Senior Secured Notes	January 15, 2018
January 2023 5.125% UM Euro Senior Secured Notes	January 21, 2018
April 2023 UM Senior Secured Notes	April 15, 2018
2025 UM Senior Secured Notes	January 15, 2020
2026 UM Senior Secured Notes	February 15, 2021
2027 UM Senior Secured Notes	January 15, 2021
2029 UM Senior Secured Notes	January 15, 2021

Unitymedia or the UM Senior Secured Notes Issuers (as applicable) may redeem some or all of the Unitymedia Notes at the following redemption prices (expressed as a percentage of the principal amount) plus accrued and unpaid interest and additional amounts (as specified in the applicable indenture), if any, to the applicable redemption date, as set forth below:

Redem	ption	price
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	Redemption price								
	2025 UM Senior Notes	2027 UM Senior Notes	2022 UM Senior Secured Notes	January 2023 UM Dollar Senior Secured Notes	January 2023 5.75% UM Euro Senior Secured Notes	January 2023 5.125% UM Euro Senior Secured Notes			
12-month period commencing	January 15	January 15	September 15	January 15	January 15	January 21			
2016	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.			
2017	N.A.	N.A.	102.750%	N.A.	N.A.	N.A.			
2018	N.A.	N.A.	101.833%	102.750%	102.875%	102.563%			
2019	N.A.	N.A.	100.917%	101.833%	101.917%	101.708%			
2020	103.063%	N.A.	100.000%	100.917%	100.958%	100.854%			
2021	102.042%	101.875%	100.000%	100.000%	100.000%	100.000%			
2022	101.021%	100.938%	N.A.	100.000%	100.000%	100.000%			
2023	100.000%	100.469%	N.A.	N.A.	N.A.	N.A.			
2024 and thereafter	100.000%	100.000%	N.A.	N.A.	N.A.	N.A.			

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

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	April 2023 UM Senior Secured Notes	2025 UM Euro Senior Secured Notes	2025 UM Dollar Senior Secured Notes	2026 UM Senior Secured Notes	2027 UM Senior Secured Notes	2029 UM Senior Secured Notes
12-month period commencing	April 15	January 15	January 15	February 15	January 15	January 15
2016	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2017	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2018	102.813%	N.A.	N.A.	N.A.	N.A.	N.A.
2019	101.875%	N.A.	N.A.	N.A.	N.A.	N.A.
2020	100.938%	102.000%	102.500%	N.A.	N.A.	N.A.
2021	100.000%	101.333%	101.667%	102.313%	101.750%	103.125%
2022	100.000%	100.667%	100.833%	101.156%	100.875%	102.083%
2023	N.A.	100.000%	100.000%	100.578%	100.438%	101.042%
2024 and thereafter	N.A.	100.000%	100.000%	100.000%	100.000%	100.000%

2015 Refinancing Transactions. On March 11, 2015, the UM Senior Secured Notes Issuers issued the 2027 UM Senior Secured Notes. The net proceeds from the 2027 UM Senior Secured Notes were used to (i) redeem 10% of the principal amount of each of the following series of notes: (a) the 2022 UM Senior Secured Notes, (b) the January 2023 5.75% UM Euro Senior Secured Notes, (c) the January 2023 5.125% UM Euro Senior Secured Notes and (d) the April 2023 UM Senior Secured Notes, each at a redemption price equal to 103% of the applicable redeemed principal amount in accordance with the indentures governing each of the notes, and (ii) prepay the then outstanding balance under the UM Senior Secured Facility (as defined and described under Unitymedia Revolving Credit Facilities below). In connection with these transactions, we recognized a loss on debt modification and extinguishment, net, of \$8.1 million. This loss includes (1) the payment of \$6.4 million of redemption premium and (2) the write-off of \$1.7 million of deferred financing costs.

On March 16, 2015, Unitymedia issued the 2027 UM Senior Notes. The net proceeds from the 2027 UM Senior Notes were used to fully redeem the €618.0 million (\$671.5 million) principal amount of 9.5% senior notes issued by Unitymedia. In connection with this transaction, we recognized a loss on debt modification and extinguishment, net, of \$91.2 million. This loss includes (i) the payment of \$89.8 million of redemption premium and (ii) the write-off of \$1.4 million of unamortized discount.

On December 23, 2015, the UM Senior Secured Notes Issuers issued the 2026 UM Senior Secured Notes. The net proceeds from the 2026 UM Senior Secured Notes were used to (i) redeem 10% of the principal amount of each of the following series of notes: (a) the 2022 UM Senior Secured Notes, (b) the January 2023 5.75% UM Euro Senior Secured Notes, (c) the January 2023 5.125% UM Euro Senior Secured Notes and (d) the April 2023 UM Senior Secured Notes, each at a redemption price equal to 103% of the applicable redeemed principal amount in accordance with the indentures governing each of the notes, and (ii) prepay the outstanding balance under the UM Senior Secured Facility. As the 10% redemptions of the 2022 UM Senior Secured Notes and the January 2023 5.125% UM Euro Senior Secured Notes were not completed until January 2016, the related proceeds from the issuance of the 2026 UM Senior Secured Notes of €108.2 million (\$117.6 million) were held in escrow at December 31, 2015 as cash collateral. In connection with the redemption of the January 2023 5.75% UM Euro Senior Secured Notes, the April 2023 UM Senior Secured Notes and the prepayment of the outstanding balance under the UM Senior Secured Facility, we recognized a loss on debt modification and extinguishment, net, of \$3.1 million in 2015. This loss includes (1) the payment of \$2.6 million of redemption premium and (2) the write-off of \$0.5 million of deferred financing costs.

2014 and 2013 Refinancing Transactions. During 2014 and 2013, we completed a number of refinancing transactions that generally resulted in lower interest rates and extended maturities. In connection with these transactions, we recognized losses on debt modification and extinguishment, net, of \$130.8 million and \$112.5 million during 2014 and 2013, respectively. These losses include (i) the payment of redemption premiums of \$115.1 million and \$75.0 million, respectively, (ii) the write-off of deferred financing costs of \$14.0 million and \$21.6 million, respectively, (iii) the write-off of unamortized discounts of \$12.3 million and \$15.9 million, respectively, and (iv) the write-off during 2014 of \$10.6 million of unamortized premium.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

### Unitymedia Revolving Credit Facilities

The Unitymedia Revolving Credit Facilities are the senior secured credit facilities of certain subsidiaries of Unitymedia. The details of our borrowings under the Unitymedia Revolving Credit Facilities as of December 31, 2015 are summarized in the following table:

Unitymedia Facility	Maturity	Interest rate	Facility amount (in borrowing currency)	wing borrowing		nrrying value
				in m	illions	
UM Senior Secured Facility (b) (d)	December 31, 2020	EURIBOR + 2.75%	€ 420.0	) \$	456.4	\$ _
UM Super Senior Secured Facility (c)	December 31, 2020	EURIBOR + 2.25%	€ 80.0	)	86.9	
Total				. \$	543.3	\$ 

- (a) At December 31, 2015, our availability under the Unitymedia Revolving Credit Facilities was limited to €435.2 million (\$472.9 million). When the relevant December 31, 2015 compliance reporting requirements have been completed, and assuming no changes from December 31, 2015 borrowing levels, we anticipate the full amount of unused borrowing capacity under the Unitymedia Revolving Credit Facilities will be available to be borrowed. The Unitymedia Revolving Credit Facilities may be used for general corporate and working capital purposes.
- (b) The UM Senior Secured Facility has a fee on unused commitments of 1.1% per year.
- (c) The UM Super Senior Secured Facility has a fee on unused commitments of 0.9% per year and is senior with respect to the priority of proceeds received from the enforcement of shared collateral to (i) the Unitymedia Notes and (ii) the UM Senior Secured Facility.

### **UPCB SPE Notes**

The details of the UPCB SPE Notes as of December 31, 2015 are summarized in the following table:

					ing principal nount		
UPCB SPE Notes	Maturity	Interest rate	Original issue amount	Borrowing currency	g U.S. \$ equivalent	Estimated fair value	Carrying value
					in mil	lions	
UPCB Finance IV Notes:							
UPCB Finance IV Dollar Notes (a)	January 15, 2025	5.375%	\$ 1,140.0	\$ 1,140.0	\$ 1,140.0	\$ 1,080.9	\$ 1,138.4
UPCB Finance IV Euro Notes	January 15, 2027	4.000%	€ 600.0	€ 600.0	652.0	616.5	652.0
UPCB Finance V Notes	November 15, 2021	7.250%	\$ 750.0	\$ 675.0	675.0	719.7	675.0
UPCB Finance VI Notes	January 15, 2022	6.875%	\$ 750.0	\$ 675.0	675.0	714.6	675.0
Total					. \$ 3,142.0	\$ 3,131.7	\$ 3,140.4

<sup>(</sup>a) The UPCB Finance IV Dollar Notes comprise (i) \$800.0 million aggregate principal amount of senior secured notes (the **Original UPCB Finance IV Dollar Notes**) and (ii) an additional \$340.0 million principal amount of senior secured notes (the **Additional UPCB Finance IV Dollar Notes**). The carrying value includes the impact of a discount with respect to the Additional UPCB Finance IV Dollar Notes.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Subject to the circumstances described below, the UPCB Finance IV Dollar Notes are non-callable until January 15, 2020, the UPCB Finance IV Euro Notes are non-callable until January 15, 2021, the UPCB Finance V Notes are non-callable until November 15, 2016 and the UPCB Finance VI Notes are non-callable until January 15, 2017 (each a **UPCB SPE Notes Call Date**). If, however, at any time prior to the applicable UPCB SPE Notes Call Date, all or a portion of the loans under the related UPCB SPE Funded Facility are voluntarily prepaid (a **UPCB Early Redemption Event**), then the applicable UPCB SPE will be required to redeem an aggregate principal amount of its UPCB SPE Notes equal to the aggregate principal amount of the loans so prepaid under the relevant UPCB SPE Funded Facility. In general, the redemption price payable will equal 100% of the principal amount of the applicable UPCB SPE Notes to be redeemed and a "make-whole" premium, which is the present value of all remaining scheduled interest payments to the applicable UPCB SPE Notes Call Date using the discount rate (as specified in the applicable indenture) as of the redemption date plus 50 basis points.

Upon the occurrence of a UPCB Early Redemption Event on or after the applicable UPCB SPE Notes Call Date, the applicable UPCB SPE will redeem an aggregate principal amount of its UPCB SPE Notes equal to the principal amount of the related UPCB SPE Funded Facility prepaid at the following redemption prices (expressed as a percentage of the principal amount), plus accrued and unpaid interest and additional amounts (as specified in the applicable indenture), if any, to the applicable redemption date, as set forth below:

	Redemption price							
	UPCB Finance IV Dollar Notes	UPCB Finance IV Euro Notes	UPCB Finance V Notes	UPCB Finance VI Notes				
12-month period commencing	January 15	January 15	November 15	January 15				
2016	N.A.	N.A.	103.625%	N.A.				
2017	N.A.	N.A.	102.417%	103.438%				
2018	N.A.	N.A.	101.208%	102.292%				
2019	N.A.	N.A.	100.000%	101.146%				
2020	102.688%	N.A.	100.000%	100.000%				
2021	101.792%	102.000%	100.000%	100.000%				
2022	100.896%	101.000%	N.A.	100.000%				
2023	100.000%	100.500%	N.A.	N.A.				
2024 and thereafter	100.000%	100.000%	N.A.	N.A.				

2015 Refinancing Transactions. During 2015, UPCB Finance IV issued (i) the Original UPCB Finance IV Dollar Notes, (ii) the UPCB Finance IV Euro Notes and (iii) the Additional UPCB Finance IV Dollar Notes, the proceeds of which were used to fund UPC Facilities AL, AK and AL2, respectively. UPC Facility AL2 has been merged with UPC Facility AL. The net proceeds from UPC Facility AL and UPC Facility AK were used to (a) prepay the remaining €190.0 million (\$206.5 million) outstanding principal amount of UPC Facility Y, together with accrued and unpaid interest and the related prepayment premium, to UPCB Finance II and, in turn, UPCB Finance II used such proceeds to fully redeem the remaining outstanding amount of its UPCB Finance II Notes, (b) prepay the \$1.0 billion outstanding principal amount of UPC Facility Z, together with accrued and unpaid interest and the related prepayment premium, to UPCB Finance III Limited (UPCB Finance III) and, in turn, UPCB Finance III used such proceeds to fully redeem the \$1.0 billion aggregate principal amount of its 6.625% senior secured notes, (c) prepay in full the then outstanding €600.0 million (\$652.0 million) amount under UPC Facility AI and (d) prepay 10% of the outstanding principal amount of each of the following: (1) UPC Facility AC, together with accrued and unpaid interest and the related prepayment premium, to UPCB Finance V and, in turn, UPCB Finance V used such proceeds to redeem 10% of the outstanding principal amount of the UPCB Finance V Notes and (2) UPC Facility AD, together with accrued and unpaid interest and the related prepayment premium, to UPCB Finance VI and, in turn, UPCB Finance VI used such proceeds to redeem 10% of the outstanding principal amount of the UPCB Finance VI Notes. The redemption price for the UPCB Finance V Notes and the UPCB Finance VI Notes was 103% of the applicable redeemed principal amount. In connection with these transactions, we recognized a loss on debt modification and extinguishment, net, of \$59.6 million. This loss includes (I) the payment of \$54.3 million of redemption premium and (II) the write-off of \$5.3 million of deferred financing costs.

### Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

### **UPC Holding Senior Notes**

The details of the UPC Holding Senior Notes as of December 31, 2015 are summarized in the following table:

	itstanding j amour		cıpaı						
UPC Holding Senior Notes	Maturity	Borrowing currency		U.S. \$ equivalent		Estimated fair value		Carrying value	g —
					in mi	llio	ns		
UPC Holding 6.375% Senior Notes (a)	September 15, 2022	€	600.0	\$	652.0	\$	693.9	\$ 647.	6
UPC Holding 6.75% Euro Senior Notes	March 15, 2023	€	450.0		489.0		528.7	489.	0
UPC Holding 6.75% CHF Senior Notes	March 15, 2023	CHF	350.0		350.1		378.8	350.	.1
Total				\$	1,491.1	\$	1,601.4	\$ 1,486.	7

### (a) Carrying value includes the impact of a discount.

At any time prior to September 15, 2017, in the case of the UPC Holding 6.375% Senior Notes, and March 15, 2018, in the case of the UPC Holding 6.75% Senior Notes, UPC Holding may redeem some or all of such UPC Holding Senior Notes by paying a "make-whole" premium, which is the present value of all scheduled interest payments until September 15, 2017 or March 15, 2018 (as applicable) using the discount rate (as specified in the applicable indenture) as of the redemption date, plus 50 basis points.

UPC Holding may redeem some or all of the UPC Holding Senior Notes at the following redemption prices (expressed as a percentage of the principal amount) plus accrued and unpaid interest and additional amounts (as specified in the applicable indenture), if any, to the applicable redemption date, as set forth below:

	Redemption price			
	UPC Holding 6.375% Senior Notes	UPC Holding 6.75% Senior Notes		
12-month period commencing	September 15	March 15		
2016	N.A.	N.A.		
2017	103.188%	N.A.		
2018	102.125%	103.375%		
2019	101.063%	102.250%		
2020	100.000%	101.125%		
2021 and thereafter	100.000%	100.000%		

2015 Transaction. During the first quarter of 2015, UPC Holding used the cash consideration received in connection with the UPC Ireland Transfer to redeem in full the €640.0 million (\$695.4 million) principal amount of its 8.375% senior notes due August 15, 2020. In connection with this transaction, we recognized a loss on debt modification and extinguishment, net, of \$69.3 million. This loss includes (i) the payment of \$59.2 million of redemption premium and (ii) the write-off of \$10.1 million of deferred financing costs.

2014 and 2013 Transactions. During 2014 and 2013, we completed a number of refinancing transactions that generally resulted in lower interest rates and extended maturities. In connection with these transactions, we recognized losses on debt modification and extinguishment, net, of \$41.5 million and \$85.5 million during 2014 and 2013, respectively, which includes (i) the payments of redemption premium of \$19.7 million and \$35.6 million, respectively, (ii) the write-off of unamortized discount of \$17.4 million and \$24.5 million, respectively, (iii) the write-off of deferred financing costs of \$4.4 million and \$19.0 million, respectively, and (iv) aggregate interest expense of nil and \$6.4 million, respectively.

### Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

### UPC Broadband Holding Bank Facility

The UPC Broadband Holding Bank Facility is the senior secured credit facility of certain subsidiaries of UPC Holding. The details of our borrowings under the UPC Broadband Holding Bank Facility as of December 31, 2015 are summarized in the following table:

UPC Broadband Holding Facility	Maturity	Interest rate	Facility amount (in borrowing currency) (a)		bo ca <sub>j</sub>	1 0 0 7				arrying value
AC (c)	November 15, 2021	7.250%	\$	675.0	\$	_	\$	675.0		
AD (c)	January 15, 2022	6.875%	\$	675.0				675.0		
AH (d)	June 30, 2021	LIBOR $+ 2.50\%$ (e)	\$	1,305.0				1,302.4		
AK (c)	January 15, 2027	4.000%	€	600.0				652.0		
AL (c)	January 15, 2025	5.375%	\$	1,140.0				1,140.0		
AM	December 31, 2021	EURIBOR + 2.75%	€	990.1		1,075.8				
Elimination of Facilities AC, AD, A		_	(	3,142.0)						
Total					\$	1,075.8	\$	1,302.4		

- (a) Except as described in (c) below, amounts represent total third-party facility amounts at December 31, 2015 without giving effect to the impact of discounts.
- (b) At December 31, 2015, our availability under the UPC Broadband Holding Bank Facility was limited to €716.4 million (\$778.4 million). When the relevant December 31, 2015 compliance reporting requirements have been completed, and assuming no changes from the December 31, 2015 borrowing levels, we anticipate that our availability under the UPC Broadband Holding Bank Facility will be limited to €858.3 million (\$932.6 million). UPC Facility AM has a fee on unused commitments of 1.1% per year.
- (c) As further discussed in the below description of the UPCB SPE Notes, the amounts borrowed by UPC Financing Partnership (UPC Financing) outstanding under UPC Facilities AC, AD, AK and AL are eliminated in Liberty Global's consolidated financial statements.
- (d) The carrying value of UPC Facility AH includes the impact of a discount.
- (e) UPC Facility AH has a LIBOR floor of 0.75%.

2015 Transactions. During the first quarter of 2015, in connection with certain internal reorganizations of our broadband and wireless communications businesses in Europe, (i) a controlling interest in UPC Broadband Ireland Ltd. and its subsidiaries was transferred from a subsidiary of UPC Holding to a subsidiary of Virgin Media (the UPC Ireland Transfer), with the remaining noncontrolling interest transferred to another subsidiary of Liberty Global outside the UPC Holding borrowing group and (ii) Ziggo Services B.V. (Ziggo Services) and its subsidiaries were transferred from a subsidiary of UPC Holding to Ziggo Group Holding (the Ziggo Services Transfer). UPC Holding used the cash consideration received in connection with the Ziggo Services Transfer and the UPC Ireland Transfer to prepay (a) the full €500.0 million (\$543.3 million) outstanding principal amount of UPC Facility V, together with accrued and unpaid interest and the related prepayment premium to UPCB Finance I Limited (UPCB Finance I) and, in turn, UPCB Finance I used such proceeds to fully redeem the €500.0 million (\$543.3 million) aggregate principal amount of UPC Facility Y, together with accrued and unpaid interest and the related prepayment premium to UPCB Finance II Limited (UPCB Finance II) and, in turn, UPCB Finance II used such proceeds to redeem €560.0 million (\$608.5 million) of the €750.0 million (\$815.0 million) aggregate principal amount of its 6.375% senior secured notes (the UPCB Finance II Notes) and (c) the remaining €870.2 million (\$945.6 million) outstanding principal amount of UPC Facility AG, together with accrued and unpaid interest. In connection with these transactions, we recognized a loss on debt modification and extinguishment,

### Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

net, of \$76.9 million. This loss includes (1) the payment of \$53.5 million of redemption premium, (2) the write-off of \$18.7 million of deferred financing costs and (3) the write-off of \$4.7 million of unamortized discount.

On August 3, 2015, UPC Financing entered into UPC Facility AM (a revolving term loan). In connection with this transaction, the then existing undrawn revolving term loan UPC Facility AI was cancelled.

2014 and 2013 Refinancing Transactions. During 2014 and 2013, we completed a number of refinancing transactions that generally resulted in additional borrowings or extended maturities under the the UPC Broadband Holding Bank Facility. In connection with these transactions, we recognized losses on debt modification and extinguishment, net, of \$16.5 million and \$11.9 million during 2014 and 2013, respectively. These losses include (i) the write-off of deferred financing costs and unamortized discounts of \$16.5 million and \$4.2 million, respectively, and (ii) third-party debt modification costs of nil and \$7.7 million, respectively.

#### Telenet SPE Notes

The details of the Telenet SPE Notes as of December 31, 2015 are summarized in the following table:

			Outstanding principal amount							
Telenet SPEs Notes	Maturity	Interest rate	Borrowing currency		U.S. \$ equivalent			stimated ir value	Carrying value	
						in mi	llior	ns		
Telenet Finance III Notes	February 15, 2021	6.625%	€	300.0	\$	326.0	\$	337.4	\$	326.0
Telenet Finance IV Notes	June 15, 2021	EURIBOR + 3.875%	€	400.0		434.6		435.2		434.6
6.25% Telenet Finance V Notes	August 15, 2022	6.250%	€	450.0		489.0		529.0		489.0
6.75% Telenet Finance V Notes	August 15, 2024	6.750%	€	250.0		271.7		298.8		271.7
Telenet Finance VI Notes	July 15, 2027	4.875%	€	530.0		575.9		555.4		575.9
Total					\$	2,097.2	\$	2,155.8	\$	2,097.2

Subject to the circumstances described below, the Telenet Finance III Notes are non-callable until February 15, 2016, the Telenet Finance IV Notes are non-callable until June 15, 2014, the 6.25% Telenet Finance V Notes are non-callable until August 15, 2017, the 6.75% Telenet Finance V Notes are non-callable until August 15, 2018 and the Telenet Finance VI Notes are non-callable until July 15, 2021 (each a **Telenet SPE Notes Call Date**). If, however, at any time prior to the applicable Telenet SPE Notes Call Date, all or a portion of the loans under the related Telenet SPE Funded Facility are voluntarily prepaid (a **Telenet Early Redemption Event**), then the applicable Telenet SPE will be required to redeem an aggregate principal amount of its Telenet SPE Notes equal to the principal amount of the loans so prepaid under the relevant Telenet SPE Funded Facility. In general, the redemption price payable will equal 100% of the principal amount of the applicable Telenet SPE Notes to be redeemed and a "make-whole" premium, which is the present value of all remaining scheduled interest payments to the applicable Telenet SPE Notes Call Date using the discount rate (as specified in the applicable indenture) as of the redemption date plus 50 basis points.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Upon the occurrence of a Telenet Early Redemption Event on or after the applicable Telenet SPE Notes Call Date, the applicable Telenet SPE will redeem an aggregate principal amount of its Telenet SPE Notes equal to the principal amount of the related Telenet SPE Funded Facility prepaid at the following redemption prices (expressed as a percentage of the principal amount), plus accrued and unpaid interest and additional amounts (as specified in the applicable indenture), if any, to the applicable redemption date, as set for below:

	Redemption price							
	Telenet Finance III Notes	Telenet Finance IV Notes	6.25% Telenet Finance V Notes	6.75% Telenet Finance V Notes	Telenet Finance VI Notes			
12-month period commencing	February 15	June 15	August 15	August 15	July 15			
2016	103.313%	100.000%	N.A.	N.A.	N.A.			
2017	102.209%	100.000%	103.125%	N.A.	N.A.			
2018	101.104%	100.000%	102.083%	103.375%	N.A.			
2019	100.000%	100.000%	101.563%	102.531%	N.A.			
2020	100.000%	100.000%	100.000%	101.688%	N.A.			
2021	100.000%	100.000%	100.000%	100.844%	102.438%			
2022	N.A.	N.A.	100.000%	100.000%	101.219%			
2023	N.A.	N.A.	N.A.	100.000%	100.609%			
2024 and thereafter	N.A.	N.A.	N.A.	100.000%	100.000%			

2015 Refinancing Transactions. On July 24, 2015, Telenet Finance VI issued the Telenet Finance VI Notes. Telenet Finance VI used the proceeds from the Telenet Finance VI Notes to fund Telenet Facility AB. The net proceeds from Telenet Facility AB were used to prepay the full €500.0 million (\$543.3 million) principal amount of Telenet Facility M, together with accrued and unpaid interest and the related prepayment premium, to Telenet Finance Luxembourg S.C.A. (**Telenet Finance**) and, in turn, Telenet Finance used such proceeds to fully redeem the €500.0 million (\$543.3 million) principal amount of its 6.375% senior secured notes. In connection with this transaction, we recognized a loss on debt modification and extinguishment, net, of \$34.3 million, representing the payment of redemption premium.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

### Telenet Credit Facility

The Telenet Credit Facility is the senior secured credit facility of certain subsidiaries of Telenet. The details of our borrowings under the Telenet Credit Facility as of December 31, 2015 are summarized in the following table:

Telenet Facility	Maturity	(in borrowing bo		(in borrowing currency) (a)		Unused borrowing capacity (b)		arrying value
					in m	illions		
O (c)	February 15, 2021	6.625%	€	300.0	\$	_	\$	326.0
P (c)	June 15, 2021	EURIBOR + 3.875%	€	400.0				434.6
U (c)	August 15, 2022	6.250%	€	450.0				489.0
V (c)	August 15, 2024	6.750%	€	250.0		_		271.7
W (d)	June 30, 2022	EURIBOR + 3.25%	€	474.1				514.2
X (e)	September 30, 2020	EURIBOR + 2.75%	€	381.0		414.0		
Y (d)	June 30, 2023	EURIBOR + 3.50%	€	882.9				957.6
Z	June 30, 2018	EURIBOR + 2.25%	€	200.0		(f)		
AA	June 30, 2023	EURIBOR + 3.50%	€	800.0		(f)		_
AB (c)	July 15, 2027	4.875%	€	530.0		_		575.9
Elimination of Telenet Facilities O	P, U, V and AB in co	onsolidation (c)				_		(2,097.2)
Total					\$	414.0	\$	1,471.8

<sup>(</sup>a) Except as described in (c) below, amounts represent total third-party facility amounts at December 31, 2015 without giving effect to the impact of discounts.

- (c) As further discussed in the below description of the Telenet SPE Notes, the amounts outstanding under Telenet Facilities O, P, U, V and AB are eliminated in Liberty Global's consolidated financial statements.
- (d) The carrying values of Telenet Facilities W and Y include the impact of discounts.
- (e) On July 1, 2015, (i) the commitments under Telenet's revolving credit facilities were increased by €85.0 million (\$92.4 million) (**Telenet Facility X2**) and (ii) a lender under the then existing Telenet Facility S agreed to novate commitments of €10.0 million (\$10.9 million) to a subsidiary of Telenet and enter into the new Telenet Facility X2, which was subsequently merged with Telenet Facility X, resulting in total increased availability under Telenet Facility X of €95.0 million (\$103.3 million). In September 2015, Telenet Facility S, which was undrawn, was cancelled.
- (f) On May 7, 2015, Telenet International entered into a new revolving credit facility (**Telenet Facility Z**) and a new term loan facility (**Telenet Facility AA**). At December 31, 2015, Telenet Facility Z and Telenet Facility AA were undrawn. In February 2016, Telenet borrowed the full amount under Telenet Facility Z and Telenet Facility AA and €217.0 million (\$245.9 million at the transaction date) under Telenet Facility X to fund a portion of the cash consideration paid to acquire BASE Company N.V. (**BASE**). Although Telenet currently has the ability, subject to certain restrictions and covenant limitations, to draw certain amounts under Telenet Facility Z and Telenet Facility AA for general corporate purposes, we expect that these facilities will remain undrawn until the closing of the acquisition of BASE. Accordingly, Telenet's unused borrowing capacity at December 31, 2015 excludes the availability under Telenet Facility Z and Telenet Facility AA. For information regarding Telenet's acquisition of BASE, see note 20.

<sup>(</sup>b) Telenet Facility X has a fee on unused commitments of 1.1% per year.

### Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

2014 Refinancing Transactions. During 2014, we completed a number of refinancing transactions that generally resulted in lower interest rates and extended maturities. In connection with these transactions, we recognized a loss on debt modification and extinguishment, net, of \$11.9 million, which includes (i) the write-off of \$7.1 million of deferred financing costs, (ii) the payment of \$3.6 million of redemption premium and (iii) the write-off of \$1.2 million of unamortized discount.

#### VTR Finance Senior Secured Notes

On January 24, 2014, VTR Finance issued \$1.4 billion principal amount of VTR Finance Senior Secured Notes. At any time prior to January 15, 2019, VTR Finance may redeem some or all of the VTR Finance Senior Secured Notes by paying a "make-whole" premium, which is the present value of all remaining scheduled interest payments to January 15, 2019 using the discount rate (as specified in the VTR Indenture) as of the applicable redemption date plus 50 basis points.

VTR Finance may redeem all or part of the VTR Finance Senior Secured Notes at the following redemption prices (expressed as a percentage of the principal amount) plus accrued and unpaid interest and additional amounts (as specified in the VTR Indenture), if any, to the applicable redemption date, as set forth below:

	price
12-month period commencing January 15:	
2019	103.438%
2020	102.292%
2021	101.146%
2022 and thereafter	100.000%

### Liberty Puerto Rico Bank Facility

The Liberty Puerto Rico Bank Facility is the senior secured credit facility of certain subsidiaries of Liberty Puerto Rico. The details of our borrowings under the Liberty Puerto Rico Bank Facility as of December 31, 2015 are summarized in the following table:

Maturity	Interest rate	Facility amount (in borrowing currency)	borrowing capacity		in borrowing carrowing capacity			arrying due (a)
			in m	illions				
January 7, 2022	LIBOR $+ 3.50\%$ (c)	\$ 765.0	\$	_	\$	757.0		
July 7, 2023	LIBOR $+ 6.75\%$ (c)	\$ 177.5				176.9		
July 7, 2020	LIBOR + 3.50%	\$ 40.0		40.0		_		
			\$	40.0	\$	933.9		
	January 7, 2022 July 7, 2023	January 7, 2022 LIBOR + 3.50% (c) July 7, 2023 LIBOR + 6.75% (c)	Maturity         Interest rate         (in borrowing currency)           January 7, 2022         LIBOR + 3.50% (c)         \$ 765.0           July 7, 2023         LIBOR + 6.75% (c)         \$ 177.5	Maturity         Interest rate         (in borrowing currency)         bo continuous           January 7, 2022         LIBOR + 3.50% (c)         \$ 765.0         \$ July 7, 2023         LIBOR + 6.75% (c)         \$ 177.5	Maturity         Interest rate         (in borrowing currency)         borrowing capacity           January 7, 2022         LIBOR + 3.50% (c)         \$ 765.0         \$ —           July 7, 2023         LIBOR + 6.75% (c)         \$ 177.5         —           July 7, 2020         LIBOR + 3.50%         \$ 40.0         40.0	Maturity         Interest rate         (in borrowing currency)         borrowing capacity         Capacity           In millions           January 7, 2022         LIBOR + 3.50% (c)         \$ 765.0         \$ —         \$           July 7, 2023         LIBOR + 6.75% (c)         \$ 177.5         —         July 7, 2020         LIBOR + 3.50%         \$ 40.0         40.0		

- (a) The carrying values of LPR Term Loan B and LPR Term Loan C include the impact of discounts.
- (b) In June 2015, we increased the principal amount outstanding under (i) LPR Term Loan B by \$235.0 million and (ii) LPR Term Loan C by \$32.5 million. Substantially all of the net proceeds from this borrowing were used to fund a portion of the purchase price for the Choice Acquisition. For additional information regarding the Choice Acquisition, see note 4.
- (c) LPR Term Loan B and LPR Term Loan C each have a LIBOR floor of 1.0%.
- (d) The LPR Revolving Loan has a fee on unused commitments of 0.50% or 0.375% depending on the consolidated total net leverage ratio (as specified in the Liberty Puerto Rico Bank Facility).

2014 Refinancing Transactions. During 2014, we completed various refinancing transactions that generally resulted in additional borrowings or extended maturities under the Liberty Puerto Rico Bank Facility. In connection with these transactions,

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

we recognized a loss on debt modification and extinguishment, net, of \$9.8 million. This loss includes (i) third-party costs of \$7.1 million, (ii) the write-off of deferred financing costs of \$3.6 million and (iii) the write-off of unamortized premium of \$0.9 million.

# Maturities of Debt and Capital Lease Obligations

Maturities of our debt and capital lease obligations as of December 31, 2015 are presented below for the named entity and its subsidiaries, unless otherwise noted. Amounts presented below represent U.S. dollar equivalents based on December 31, 2015 exchange rates:

I I ACC

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Debt:

				Libert	y G	lobal Gr	oup						L	iLA	C Grou	р																									
	Virgin Media	Ziggo Group Holding (a)	Un	itymedia		UPC olding (b)		enet c)	Other		Total Liberty Global Group	V	ΓR	P	Puerto LiL				Puerto		Puerto		Puerto		Puerto		Puerto		Puerto		Puerto		Puerto		Puerto		Puerto		otal LAC oup		Fotal
								ir	n millions																																
Year ending December 31:																																									
2016	\$ 1,028.5	\$ 125.7	\$	254.6	\$	593.7	\$	8.0	\$ 370.2	\$	2,380.7	\$	_	\$	_	\$	_	\$	2,380.7																						
2017	_	0.4		_		_		8.0	511.7		520.1		_		_		_		520.1																						
2018	_	_		_		_		8.0	1,261.5		1,269.5		_		_		_		1,269.5																						
2019	_	_		_		_		18.4	351.6		370.0		_		_		_		370.0																						
2020	_	77.9		_		_		12.2	27.6		117.7		_		_		_		117.7																						
Thereafter	13,804.9	7,783.4		7,569.6		5,938.1	3,0	657.1	27.6		38,780.7	1,4	0.00		942.5	2,	342.5	4	1,123.2																						
Total debt maturities	14,833.4	7,987.4		7,824.2		6,531.8	3,	711.7	2,550.2		43,438.7	1,4	00.0		942.5	2,	342.5	4	5,781.2																						
Unamortized premium																																									
(discount)	16.8	25.2		_		(8.6)		(2.7)	(68.8)		(38.1)		_		(8.6)		(8.6)		(46.7)																						
Total debt	\$14,850.2	\$ 8,012.6	\$	7,824.2	\$	6,523.2	\$ 3,	709.0	\$ 2,481.4	\$	43,400.6	\$1,4	0.00	\$	933.9	\$2,	333.9	\$ 4	5,734.5																						
Current portion (d)	\$ 1,029.9	\$ 125.7	\$	254.6	\$	593.7	\$	8.0	\$ 370.2	\$	2,382.1	\$	<u> </u>	\$		\$	_	\$	2,382.1																						
Noncurrent portion	\$13,820.3	\$ 7,886.9	\$	7,569.6	\$	5,929.5	\$ 3,	701.0	\$2,111.2	\$	41,018.5	\$1,4	00.0	\$	933.9	\$2,	333.9	\$ 4	3,352.4																						
										_				_																											

- (a) Amounts include the Ziggo SPE Notes issued by the Ziggo SPEs. As described above, the Ziggo SPEs are consolidated by Ziggo Group Holding and Liberty Global.
- (b) Amounts include the UPCB SPE Notes issued by the UPCB SPEs. As described above, the UPCB SPEs are consolidated by UPC Holding and Liberty Global.
- (c) Amounts include the Telenet SPE Notes issued by the Telenet SPEs. As described above, the Telenet SPEs are consolidated by Telenet and Liberty Global.
- (d) The outstanding principal amounts of our subsidiaries' revolving credit facilities are included in our current debt maturities.

# LIBERTY GLOBAL PLC Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

# Capital lease obligations:

				Liber	ty (	Global Gr	oup	)						
	Un	itymedia	_1	Telenet		Virgin Media		Other		Total Liberty Global Group	Li	otal LAC roup		Total
Voor anding December 21:							in n	nillions						
Year ending December 31:	_		_		_		_		_				_	
2016	\$	79.7	\$	63.6	\$	76.4	\$	24.0	\$	243.7	\$	0.8	\$	244.5
2017		79.7		60.3		35.5		18.9		194.4		0.2		194.6
2018		79.7		58.2		12.0		12.7		162.6				162.6
2019		79.7		48.7		5.2		7.8		141.4				141.4
2020		79.7		46.0		4.2		5.5		135.4				135.4
Thereafter		787.5		218.4		206.0		42.8		1,254.7				1,254.7
Total principal and interest payments		1,186.0		495.2		339.3		111.7		2,132.2		1.0		2,133.2
Amounts representing interest		(482.9)		(124.1)		(179.8)		(23.5)		(810.3)		(0.1)		(810.4)
Present value of net minimum lease payments	\$	703.1	\$	371.1	\$	159.5	\$	88.2	\$	1,321.9	\$	0.9	\$	1,322.8
Current portion	\$	26.3	\$	40.5	\$	69.1	\$	19.1	\$	155.0	\$	0.8	\$	155.8
Noncurrent portion	\$	676.8	\$	330.6	\$	90.4	\$	69.1	\$	1,166.9	\$	0.1	\$	1,167.0

# Non-cash Refinancing Transactions

During 2015, 2014 and 2013, certain of our refinancing transactions included non-cash borrowings and repayments of debt aggregating \$3,586.5 million, \$5,418.8 million and \$5,061.5 million, respectively. During 2013, we also recorded a \$3,557.5 million non-cash increase to our debt as a result of certain financing transactions completed in contemplation of the execution of the Virgin Media Merger Agreement. For additional information, see note 4.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

# (11) <u>Income Taxes</u>

Liberty Global files its primary income tax return in the U.K. Its subsidiaries file income tax returns in the U.K., the U.S., the Netherlands and a number of other jurisdictions. The income taxes of Liberty Global and its subsidiaries are presented on a separate return basis for each tax-paying entity or group.

The components of our loss from continuing operations before income taxes are as follows:

	Year	end	led Decembe	r 31,				
	2015		2014		2013			
		ir	millions					
The Netherlands	\$ (1,353.3)	\$	(644.5)	\$	799.9			
U.S	(924.5)		(1,105.6)		(306.3)			
U.K	778.1		585.7		(976.0)			
Switzerland	395.3		326.1		284.3			
Chile	182.3		43.1		(84.5)			
Belgium	175.4		21.5		89.5			
Germany	(5.1)		(294.7)		(355.8)			
Other	67.2		12.5		22.4			
Total	\$ (684.6)	\$	(1,055.9)	\$	(526.5)			
Other	\$ 67.2	\$	12.5	\$	22.4			

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Income tax benefit (expense) consists of:

	(	Current	D	eferred		Total
			in	millions		
Year ended December 31, 2015:						
Continuing operations:						
U.K	\$	(0.9)	\$	(208.5)	\$	(209.4)
The Netherlands		2.5		159.0		161.5
Belgium		(125.4)		11.1		(114.3)
Switzerland		(63.2)		(14.7)		(77.9)
Chile		(57.4)		13.5		(43.9)
Germany		(66.7)		24.3		(42.4)
U.S. (a)		(81.2)		58.7		(22.5)
Other		(22.7)		6.7		(16.0)
Total — continuing operations	\$	(415.0)	\$	50.1	\$	(364.9)
Year ended December 31, 2014:						
Continuing operations:						
U.K	\$	(2.1)	\$	113.4	\$	111.3
U.S. (a)		(22.5)		129.6		107.1
Belgium		(138.7)		31.7		(107.0)
Switzerland		(76.8)		3.1		(73.7)
The Netherlands		11.1		42.5		53.6
Germany		(22.6)		37.0		14.4
Chile		17.1		(24.1)		(7.0)
Other		(41.1)		17.4		(23.7)
Total — continuing operations	\$	(275.6)	\$	350.6	\$	75.0
Discontinued operation.	\$		\$	(0.1)	\$	(0.1)
Year ended December 31, 2013:						
Continuing operations:						
U.K	\$	(2.4)	\$	(245.2)	\$	(247.6)
Belgium		(97.1)		(16.2)		(113.3)
The Netherlands		0.5		97.3		97.8
Switzerland		(53.6)		(4.4)		(58.0)
Germany		(13.2)		(38.1)		(51.3)
Chile		(34.0)		56.0		22.0
U.S. (a)		(106.0)		104.9		(1.1)
Other		(31.1)		27.1		(4.0)
Total — continuing operations	\$	(336.9)	\$	(18.6)	\$	(355.5)
Discontinued operation	<del></del>	(20.5)	\$	(2.2)	\$	(22.7)

<sup>(</sup>a) Includes federal and state income taxes. Our U.S. state income taxes were not material during any of the years presented.

### Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Income tax benefit (expense) attributable to our loss from continuing operations before income taxes differs from the amounts computed using the applicable income tax rate as a result of the following factors:

		Year					Year ended December 31,				
		2015				2013					
			in	millions							
Computed "expected" tax benefit (a)	\$	136.9	\$	221.7	\$	121.1					
Change in valuation allowances (b):											
Decrease		(508.3)		(373.1)		(112.6)					
Increase		6.8		11.9		31.7					
Enacted tax law and rate changes (c)		(280.5)		23.9		(377.8)					
Tax effect of intercompany financing		154.9		166.9		82.7					
International rate differences (b) (d):											
Increase		200.8		266.4		148.2					
Decrease		(52.7)		(27.6)		(50.8)					
Basis and other differences in the treatment of items associated with investments in subsidiaries and affiliates (b):											
Decrease		(96.9)		(168.0)		(288.0)					
Increase		3.3		32.6		284.0					
Non-deductible or non-taxable interest and other expenses (b):											
Decrease		(106.6)		(236.5)		(133.5)					
Increase		48.1		58.0		85.2					
Non-deductible or non-taxable foreign currency exchange results (b):											
Increase		53.2		71.9		0.5					
Decrease		(5.1)		(16.3)		(56.1)					
Recognition of previously unrecognized tax benefits		44.4		29.5							
Tax benefit associated with technology innovation		21.0									
Change in subsidiary tax attributes due to a deemed change in control						(88.0)					
Other, net		15.8		13.7		(2.1)					
Total income tax benefit (expense)	\$	(364.9)	\$	75.0	\$	(355.5)					
	_										

<sup>(</sup>a) The statutory or "expected" tax rates are the U.K. rates of 20.0%, 21.0% and 23.0% for 2015, 2014 and 2013, respectively.

<sup>(</sup>b) Country jurisdictions giving rise to increases are grouped together and shown separately from country jurisdictions giving rise to decreases.

<sup>(</sup>c) In November 2015, it was announced that the U.K. corporate income tax rate will change from the current rate of 20.0% to 19.0% in April 2017 and 18.0% in April 2020. The impact of these rate changes on our deferred tax balances was recorded in the fourth quarter of 2015 when the relevant legislation was enacted. In April 2014, the U.K. corporate income tax rate decreased from 23.0% to 21.0%. Substantially all of the impact of the April 2014 rate change on our deferred tax balances was recorded in the third quarter of 2013 when the relevant legislation was enacted.

<sup>(</sup>d) Amounts reflect adjustments (either an increase or a decrease) to "expected" tax benefit for statutory rates in jurisdictions in which we operate outside of the U.K.

### Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

The current and non-current components of our deferred tax assets are as follows:

	Decem	ber	31,
	2015 (a)		2014
	in mi	llior	18
Current deferred tax assets	\$ _	\$	290.3
Non-current deferred tax assets (b)	2,342.9		2,587.0
Current deferred tax liabilities			(0.6)
Non-current deferred tax liabilities (b)	(1,785.7)		(2,369.4)
Net deferred tax asset	\$ 557.2	\$	507.3

<sup>(</sup>a) In accordance with ASU 2015-17, all of our deferred tax balances are reflected as noncurrent in our December 31, 2015 balance sheet. Our December 31, 2014 deferred tax balances have not been retroactively revised. For further information, see note 2.

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities are presented below:

	 Decem	ber	31,
	2015		2014
	in mi	llio	18
Deferred tax assets:			
Net operating loss and other carryforwards	\$ 5,873.2	\$	6,637.9
Property and equipment, net	2,583.1		2,970.7
Debt	1,611.7		1,189.0
Derivative instruments	173.1		345.9
Intangible assets	112.4		149.6
Other future deductible amounts	272.5		265.3
Deferred tax assets	10,626.0		11,558.4
Valuation allowance	(6,395.6)		(6,679.4)
Deferred tax assets, net of valuation allowance	4,230.4		4,879.0
Deferred tax liabilities:			
Intangible assets	(1,826.5)		(2,338.2)
Property and equipment, net	(1,053.4)		(1,362.9)
Investments	(374.5)		(367.6)
Derivative instruments	(280.7)		(142.7)
Other future taxable amounts	(138.1)		(160.3)
Deferred tax liabilities	(3,673.2)		(4,371.7)
Net deferred tax asset.	\$ 557.2	\$	507.3

Our deferred income tax valuation allowance decreased \$283.8 million in 2015. This decrease reflects the net effect of (i) the net tax expense related to our continuing operations of \$501.5 million, (ii) foreign currency translation adjustments, (iii) the effect of enacted tax law and rate changes and (iv) other individually insignificant items.

<sup>(</sup>b) Our non-current deferred tax assets and liabilities are included in other assets, net and other long-term liabilities, respectively, in our consolidated balance sheets.

### Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Virgin Media had property and equipment on which future U.K. tax deductions can be claimed of \$21.0 billion and \$21.6 billion at December 31, 2015 and 2014, respectively. The maximum amount of these "capital allowances" that can be claimed in any one year is 18% of the remaining balance, after additions, disposals and prior claims. The tax effects of the excess of these capital allowances over the related financial reporting bases are included in the 2015 and 2014 deferred tax assets related to property and equipment, net, in the above table.

At December 31, 2015, our unrecognized excess tax benefits aggregated \$179.0 million. These excess tax benefits, which represent tax deductions in excess of the financial reporting expense for share-based compensation, will not be recognized for financial reporting purposes until such time as these tax benefits can be realized as a reduction of income taxes payable. The tax effects of these unrecognized excess tax benefits are not included in the above table.

The significant components of our tax loss carryforwards and related tax assets at December 31, 2015 are as follows:

Country	Tax loss ryforward		Related ax asset	Expiration date
·	in mi	llions		
U.K.:				
	4=000		• • • • •	- 1 m :
Amount attributable to capital losses	\$ 17,822.6	\$	3,208.0	Indefinite
Amount attributable to net operating losses	1,528.8		275.2	Indefinite
The Netherlands	3,539.1		884.8	2016-2024
Germany	2,002.2		321.8	Indefinite
U.S	1,323.2		329.4	2019-2033
Luxembourg	1,052.0		307.4	Indefinite
Belgium	586.4		199.3	Indefinite
France	522.7		180.0	Indefinite
Ireland	558.5		69.8	Indefinite
Hungary	230.9		43.9	2020-2025
Other	247.8		53.6	Various
Total	\$ 29,414.2	\$	5,873.2	

Our tax loss carryforwards within each jurisdiction combine all companies' tax losses (both capital and ordinary losses) in that jurisdiction, however, certain tax jurisdictions limit the ability to offset taxable income of a separate company or different tax group with the tax losses associated with another separate company or group. Further, tax jurisdictions restrict the type of taxable income that the above losses are able to offset. The majority of the tax losses shown in the above table are not expected to be realized, including certain losses that are limited in use due to change in control or same business tests.

We intend to indefinitely reinvest earnings from certain non-U.S. operations except to the extent the earnings are subject to current income taxes. At December 31, 2015, income and withholding taxes for which a net deferred tax liability might otherwise be required have not been provided on an estimated \$9.1 billion of cumulative temporary differences (including, for this purpose, any difference between the aggregate tax basis in stock of a consolidated subsidiary and the corresponding amount of the subsidiary's net equity, including cumulative translation adjustments, determined for financial reporting purposes) on non-U.S. entities. The determination of the additional withholding tax that would arise upon a reversal of temporary differences is impractical to estimate as it is subject to offset by available foreign tax credits and subject to certain limitations.

In general, a U.K. or U.S. corporation may claim a foreign tax credit against its income tax expense for foreign income taxes paid or accrued. A U.S. corporation may also claim a credit for foreign income taxes paid or accrued on the earnings of a foreign corporation paid to the U.S. corporation as a dividend.

Our ability to claim a foreign tax credit for dividends received from our foreign subsidiaries or foreign taxes paid or accrued is subject to various significant limitations under U.S. tax laws including a limited carry back and carry forward period. Some of our operating companies are located in countries with which the U.K. or U.S. does not have income tax treaties. Because we lack

### Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

treaty protection in these countries, we may be subject to high rates of withholding taxes on distributions and other payments from these operating companies and may be subject to double taxation on our income. Limitations on the ability to claim a foreign tax credit, lack of treaty protection in some countries and the inability to offset losses in one jurisdiction against income earned in another jurisdiction could result in a high effective tax rate on our earnings. Since a significant portion of our revenue is generated outside of the U.K. and substantially all of our revenue is generated outside the U.S., including in jurisdictions that do not have tax treaties with the U.K. or U.S., these risks are greater for us than for companies that generate most of their revenue in the U.K. or U.S. or in jurisdictions that have these treaties.

Through our subsidiaries, we maintain a presence in many countries. Many of these countries maintain highly complex tax regimes that differ significantly from the system of income taxation used in the U.K. and the U.S. We have accounted for the effect of these taxes based on what we believe is reasonably expected to apply to us and our subsidiaries based on tax laws currently in effect and reasonable interpretations of these laws. Because some jurisdictions do not have systems of taxation that are as well established as the system of income taxation used in the U.K., U.S. or tax regimes used in other major industrialized countries, it may be difficult to anticipate how other jurisdictions will tax our and our subsidiaries' current and future operations.

Although we intend to take reasonable tax planning measures to limit our tax exposures, no assurance can be given that we will be able to do so.

We and our subsidiaries file consolidated and standalone income tax returns in various jurisdictions. In the normal course of business, our income tax filings are subject to review by various taxing authorities. In connection with such reviews, disputes could arise with the taxing authorities over the interpretation or application of certain income tax rules related to our business in that tax jurisdiction. Such disputes may result in future tax and interest and penalty assessments by these taxing authorities. The ultimate resolution of tax contingencies will take place upon the earlier of (i) the settlement date with the applicable taxing authorities in either cash or agreement of income tax positions or (ii) the date when the tax authorities are statutorily prohibited from adjusting the company's tax computations.

In general, tax returns filed by our company or our subsidiaries for years prior to 2008 are no longer subject to examination by tax authorities. Certain of our subsidiaries are currently involved in income tax examinations in various jurisdictions in which we operate, including Chile (2010 through 2012), the Czech Republic (2013), Germany (2008 through 2013), Hungary (2012 through 2013), the Netherlands (2013 through 2015), Poland (2013), Slovakia (2011), Switzerland (2011-2012) and the U.S. (2009 through 2015). Except as noted below, any adjustments that might arise from the foregoing examinations are not expected to have a material impact on our consolidated financial position or results of operations. In the U.S., we have received notices of adjustment from the Internal Revenue Service with respect to our 2013, 2010 and 2009 income tax returns, as well as a proposed adjustment to our 2013 withholding tax return. We have entered into the appeals process with respect to the 2010 and 2009 matters. While we believe that the ultimate resolution of these proposed adjustments will not have a material impact on our consolidated financial position, results of operations or cash flows, no assurance can be given that this will be the case given the amounts involved and the complex nature of the related issues.

The changes in our unrecognized tax benefits are summarized below:

	2015	201	14	2013
		in mil	lions	
Balance at January 1	\$ 513.5	\$	490.9 \$	359.7
Additions based on tax positions related to the current year	142.3		38.2	102.3
Reductions for tax positions of prior years	(42.2)		(50.2)	(14.2)
Additions for tax positions of prior years	27.0		64.5	41.5
Foreign currency translation	(22.3)		(27.0)	7.9
Lapse of statute of limitations.	(8.3)		(1.9)	(6.3)
Settlements with tax authorities	(0.1)		(1.0)	_
Balance at December 31	\$ 609.9	\$	513.5 \$	490.9
· · · · · · · · · · · · · · · · · · ·				

No assurance can be given that any of these tax benefits will be recognized or realized.

### Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

As of December 31, 2015, our unrecognized tax benefits included \$299.4 million of tax benefits that would have a favorable impact on our effective income tax rate if ultimately recognized, after considering amounts that we would expect to be offset by valuation allowances and other factors.

During 2016, it is reasonably possible that the resolution of ongoing examinations by tax authorities as well as expiration of statutes of limitation could result in significant reductions to our unrecognized tax benefits related to tax positions taken as of December 31, 2015. The amount of any such reductions could range up to \$250 million. Other than the potential impacts of these ongoing examinations and the expected expiration of certain statutes of limitation, we do not expect any material changes to our unrecognized tax benefits during 2016. No assurance can be given as to the nature or impact of any changes in our unrecognized tax positions during 2016.

During 2015, 2014 and 2013, the income tax benefit (expense) of our continuing operations includes net income tax expense of \$10.3 million, \$10.9 million and \$14.0 million, respectively, representing the net accrual of interest and penalties during the period. Our other long-term liabilities include accrued interest and penalties of \$61.4 million at December 31, 2015.

### (12) Equity

### Capitalization

Our authorized share capital consists of an aggregate nominal amount of \$20.0 million, consisting of any of the following: (i) Liberty Global Shares (Class A, B or C), each with a nominal value of \$0.01 per share, (ii) LiLAC Shares (Class A, B or C), each with a nominal value of \$0.01 per share, (iii) preference shares, with a nominal value to be determined by the board of directors, the issuance of one or more classes or series of which as may be authorized by the board of directors, and (iv) any other shares of one or more classes as may be determined by the board of directors or by the shareholders of Liberty Global.

Under Liberty Global's Articles of Association, effective as of July 1, 2015, holders of Liberty Global Class A ordinary shares and LiLAC Class A ordinary shares are entitled to one vote for each such share held, and holders of Liberty Global Class B ordinary shares and LiLAC Class B ordinary shares are entitled to 10 votes for each such share held, on all matters submitted to a vote of Liberty Global shareholders at any general meeting (annual or special). Holders of Liberty Global Class C ordinary shares and LiLAC Class C ordinary shares are not entitled to any voting powers except as required by law.

At the option of the holder, each Liberty Global Class B ordinary share is convertible into one Liberty Global Class A ordinary share and each LiLAC Class B ordinary share is convertible into one LiLAC Class A ordinary share. One Liberty Global Class A ordinary share is reserved for issuance for each Liberty Global Class B ordinary share that is issued (10,472,517 shares issued as of December 31, 2015), and one LiLAC Class A ordinary share is reserved for issuance for each LiLAC Class B ordinary share (523,423 shares issued as of December 31, 2015). At December 31, 2015, there were (i) 873,333 and 2,738,536 Liberty Global Class A and Class C ordinary shares, respectively, reserved for issuance pursuant to outstanding stock options, (ii) 10,582,609 and 27,314,828 Liberty Global Class A and Class C ordinary shares, respectively, reserved for issuance pursuant to outstanding SARs and PSARs and (iii) 2,255,176, 666,667 and 3,352,533 Liberty Global Class A, Class B and Class C ordinary shares, respectively, reserved for issuance pursuant to outstanding PSUs, PGUs and RSUs. In addition, there were (a) 21,233 and 57,742 LiLAC Class A and Class C ordinary shares, respectively, reserved for issuance pursuant to outstanding SARs and PSARs and (c) 88,016, 33,333 and 114,643 LiLAC Class A, Class B and Class C ordinary shares, respectively, reserved for issuance pursuant to outstanding PSUs, PGUs and RSUs.

Subject to any preferential rights of any outstanding class of our preference shares, the holders of Liberty Global and LiLAC Class A, Class B and Class C ordinary shares will be entitled to such dividends as may be declared from time to time by our board of directors from funds available therefore. Such dividends may be declared in favor of Liberty Global Ordinary Shares and LiLAC Ordinary Shares, in equal or unequal amounts, or only in favor of the Liberty Global Ordinary Shares or the LiLAC Ordinary Shares. There are currently no contractual restrictions on our ability to pay dividends in cash or shares.

In the event of our liquidation, dissolution and winding up, after payment or provision for payment of our debts and liabilities and subject to the prior payment in full of any preferential amounts to which our preference shareholders may be entitled, the holders of Liberty Global ordinary shares and LiLAC ordinary shares will be entitled to receive their proportionate interests,

### Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

expressed in liquidation units, in any assets available for distribution to our ordinary shares regardless of whether such assets are then attributed to the Liberty Global Group or the LiLAC Group. Liquidation units will be allocated to each Liberty Global ordinary share and each LiLAC ordinary share, respectively, based on their respective volume-weighted average price over the 20 trading-day period commencing shortly after the commencement of ordinary-course (regular-way) trading of the LiLAC Shares. Pursuant to the terms of our articles of association, the liquidation units for each Liberty Global Share and each LiLAC Share are 1 and 0.94893, respectively.

On January 26, 2014, our board of directors approved a share split in the form of a share dividend (the **2014 Share Dividend**), which constitutes a bonus issue under our articles of association and English law, of one Liberty Global Class C ordinary share on each outstanding Liberty Global Class A, Class B and Class C ordinary share as of the February 14, 2014 record date. The distribution date for the 2014 Share Dividend was March 3, 2014. All Liberty Global share and per share amounts presented herein give retrospective effect to the 2014 Share Dividend.

A summary of the changes in our share capital during 2015 is set forth in the table below:

		Liber	ty G	lobal S	Shar	es		Li	LAC	Shar	es		O	ld Lib	al Shares																	
	Cla	iss A	Cla	ass B	Cl	ass C	Cla	ass A	Cla	iss B	Cla	ıss C	Cla	Class A		Class A		Class B		Class B		Class B		Class B		Class B		Class B		Class B		ass C
Balance at January 1, 2015	\$	_	\$		\$		\$		\$	_	\$	_	\$	2.5	\$	0.1	\$	6.3														
Repurchase and cancellation of Old Liberty Global Shares		_	*	_	•	_	,	_	•		•	_	•	_	·	_	•	(0.1)														
Liberty Global call option contracts																		(0.1)														
Balance at June 30, 2015		_		_				_		_		_		2.5		0.1		6.1														
Impact of the LiLAC Transaction		2.5		0.1		6.1		0.1				0.3		(2.5)		(0.1)		(6.1)														
Repurchase and cancellation of Liberty Global Shares						(0.1)						_						_														
Liberty Global call option contracts						(0.1)																										
Balance at December 31, 2015	\$	2.5	\$	0.1	\$	5.9	\$	0.1	\$		\$	0.3	\$		\$		\$															

### Share Repurchases

During 2015, 2014 and 2013, our board of directors authorized various share repurchase programs, the most recent of which provides for the repurchase of up to \$4.5 billion (before direct acquisition costs) of Liberty Global Class A and/or Class C ordinary shares. Under these plans, we receive authorization to acquire up to the specified amount of Liberty Global Class A and Class C ordinary shares or other authorized securities from time to time through open market or privately negotiated transactions, which may include derivative transactions. The timing of the repurchase of shares or other securities pursuant to our equity repurchase programs, which may be suspended or discontinued at any time, is dependent on a variety of factors, including market conditions. As of December 31, 2015, the remaining amount authorized for share repurchases was \$1,601.1 million. Subsequent to December 31, 2015, our board of directors increased this amount to \$4.0 billion.

As a U.K. incorporated company, we may only elect to repurchase shares or pay dividends to the extent of our "Distributable Reserves." Distributable Reserves, which are not linked to a GAAP reported amount, may be created through the earnings of the U.K. parent company and, amongst other methods, through a reduction in share premium approved by the English Companies Court. Based on the amounts set forth in our 2014 U.K. Companies Act Report dated April 27, 2015, which are our most recent "Relevant Accounts" for the purposes of determining our Distributable Reserves under U.K. law, our Distributable Reserves are \$27.9 billion. This amount does not reflect earnings, share repurchases or other activity that occurred in 2015, each of which impacts the amount of our Distributable Reserves.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

The following table provides details of our share repurchases during 2015, 2014 and 2013:

	Class A Liberty and Class/S Liberty	Serie	s A Old	Class C Liberty and Class/S Liberty			
Purchase date	Shares purchased		verage price paid per share (a)	Shares purchased	erage price paid per share (a)	То	tal cost (a)
Shares purchased pursuant to repurchase programs during:						in	millions
2015 (b)		\$		49,984,562	\$ 46.91	\$	2,344.5
2014 (c)	8,062,792	\$	42.19	28,401,019	\$ 44.25	\$	1,596.9
2013 (c)	6,550,197	\$	37.70	24,761,397	\$ 36.55	\$	1,151.9

- (a) Includes direct acquisition costs and the effects of derivative instruments, where applicable.
- (b) Amounts include repurchases of (i) Old Liberty Global Shares from January 1 through June 30, 2015 and (ii) Liberty Global Shares from July 1 through December 31, 2015.
- (c) Amounts include repurchases of Old Liberty Global Shares.

### Call Option Contracts

From time to time, we enter into call option contracts pursuant to which we contemporaneously (i) sell call options on shares of Liberty Global ordinary shares and (ii) purchase call options on an equivalent number of shares of Liberty Global ordinary shares with an exercise price of zero. These contracts can result in the receipt of cash and shares of Liberty Global ordinary shares. Shares acquired through the exercise of the call options are included in our share repurchases and the net gain on cash settled contracts is recorded as an increase to additional paid-in capital in our consolidated statements of equity.

### Acquisition of Interests in VTR and VTR Wireless

On March 14, 2014, a subsidiary of VTR Finance acquired each of the 20.0% noncontrolling ownership interests in VTR and VTR Wireless SpA (VTR Wireless) from Inversiones Corp Comm 2 SpA (the VTR NCI Acquisition), formerly known as Corp Comm S.A. (the VTR NCI Owner). VTR Wireless was an indirect subsidiary of Liberty Global that was merged with a subsidiary of VTR in December 2014. The consideration for the VTR NCI Acquisition was satisfied by the allotment and issuance of 10,091,178 Old Liberty Global Class C ordinary shares to the VTR NCI Owner. The VTR NCI Acquisition has been accounted for as an equity transaction, the net effect of which was to record the issued Old Liberty Global Class C shares at the \$185.4 million carrying value of the acquired noncontrolling interests.

### Other

Telenet Tender. On December 17, 2012, Binan Investments B.V. (**Binan**), our wholly-owned subsidiary, launched a voluntary and conditional cash public offer (the **Telenet Tender**) for (i) all of Telenet's issued shares that Binan did not already own or that were not held by Telenet (the **Telenet Bid Shares**) and (ii) certain outstanding vested and unvested employee warrants (the **Telenet Bid Warrants**). As of the February 1, 2013 transaction date of the Telenet Tender, the offer price for the Telenet Bid Shares was €35.00 (\$47.85) per share. The offer prices for the Telenet Bid Warrants, which were calculated using the Black Scholes option pricing model and a price of €35.00 for each of the Telenet Bid Shares, ranged from €13.48 (\$18.43) per share to €25.47 (\$34.82) per share.

Pursuant to the Telenet Tender, we paid aggregate consideration of €332.5 million (\$454.6 million at the transaction date) to acquire (i) 9,497,637 of the Telenet Bid Shares, increasing our ownership interest in Telenet's issued and outstanding shares at such date to 58.4%, and (ii) 3,000 of the Telenet Bid Warrants. As we owned a controlling financial interest in Telenet prior to the launch of the Telenet Tender, we accounted for the impact of the acquisition of the additional Telenet shares as an equity transaction.

### Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Subsidiary Distributions. From time to time, Telenet, VTR and certain other of our subsidiaries make cash distributions to their respective shareholders. Our share of these distributions is eliminated in consolidation and the noncontrolling interest owners' share of these distributions is reflected as a charge against noncontrolling interests in our consolidated statements of equity.

#### Restricted Net Assets

The ability of certain of our subsidiaries to distribute or loan all or a portion of their net assets to our company is limited by the terms of applicable debt facilities. At December 31, 2015, substantially all of our net assets represented net assets of our subsidiaries that were subject to such limitations.

### (13) Share-based Compensation

Our share-based compensation expense is based on the share-based incentive awards held by our and our subsidiaries' employees, including awards issued by Liberty Global.

A summary of our aggregate share-based compensation expense is set forth below:

	Year	ende	d Decemb	er 31	,
	2015		2014		2013
		in	millions		
Liberty Global shares:					
Performance-based incentive awards (a)	\$ 157.1	\$	129.9	\$	58.6
Other share-based incentive awards	149.6		99.7		182.9
Total Liberty Global shares (b) (c)	306.7		229.6		241.5
Telenet share-based incentive awards (d)	9.2		14.6		56.5
Other	2.3		13.0		4.5
Total	\$ 318.2	\$	257.2	\$	302.5
Included in:					
Continuing operations:					
Operating expense:					
Liberty Global Group	\$ 3.1	\$	4.8	\$	10.8
LiLAC Group	0.3		2.8		1.3
Total operating expense	3.4		7.6		12.1
SG&A expense:					
Liberty Global Group	312.7		240.8		283.5
LiLAC Group (c) (e)	2.1		8.8		5.1
Total SG&A expense	314.8		249.6		288.6
Total — continuing operations	318.2		257.2		300.7
Discontinued operation			_		1.8
Total	\$ 318.2	\$	257.2	\$	302.5

<sup>(</sup>a) Includes share-based compensation expense related to (i) Liberty Global PSUs, (ii) a challenge performance award plan for certain executive officers and key employees (the **Challenge Performance Awards**) and (iii) for 2015 and 2014, PGUs to our Chief Executive Officer, as described below. The Challenge Performance Awards include PSARs and PSUs.

<sup>(</sup>b) In connection with the Virgin Media Acquisition, we issued Liberty Global share-based incentive awards (Virgin Media Replacement Awards) to employees and former directors of Virgin Media in exchange for corresponding Virgin Media awards. Virgin Media recorded share-based compensation expense of \$54.1 million and \$55.8 million during 2015 and 2014, respectively, including compensation expense related to the Virgin Media Replacement Awards and new awards that

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

were granted after the Virgin Media Replacement Awards were issued. During 2013, Virgin Media recorded share-based compensation expense of \$134.3 million, primarily related to the Virgin Media Replacement Awards, including \$80.1 million that was charged to expense in recognition of the Virgin Media Replacement Awards that were fully vested on June 7, 2013 or for which vesting was accelerated pursuant to the terms of the Virgin Media Merger Agreement on or prior to December 31, 2013.

- In connection with the LiLAC Transaction, the compensation committee of our board of directors approved modifications to our outstanding share-based incentive awards (the Award Modifications) in accordance with the underlying share-based incentive plans. The objective of the compensation committee was to ensure a relatively unchanged intrinsic value of outstanding equity awards before and after the bonus issuance of the LiLAC Shares. The mechanism to modify outstanding share-based incentive awards, as approved by the compensation committee, utilized the volume-weighted average price of the respective shares for the five days prior to and the five days following the bonus issuance (Modification VWAPs). In order to determine if any incremental stock-based compensation expense should be recorded as a result of the Award Modifications, we are required to measure the changes in the fair values of the then outstanding share-based incentive awards using market prices immediately before and immediately after the Award Modifications. Due to declines in the share prices of our Class A and Class C Liberty Global Shares following the bonus issuance, the exercise prices of options, SARs and PSARs determined using the Modification VWAPs were lower than the exercise prices that would have resulted if the market prices immediately before and after the Award Modifications had been used. Accordingly, the Black-Scholes fair values of our options, SARs and PSARs increased as a result of the Award Modifications, resulting in incremental stock-based compensation expense of \$99.3 million. This amount includes \$69.3 million of expense recognized during 2015 related to awards that vested on or prior to December 31, 2015 and \$30.0 million of expense that will be recognized in future periods through 2019 as the related awards vest.
- (d) Represents the share-based compensation expense associated with Telenet's share-based incentive awards, which, at December 31, 2015, included (i) warrants and employee stock options (1,813,815 awards outstanding at a weighted average exercise price of €42.17 (\$45.82)), (ii) performance-based specific stock option plans for the Chief Executive Officer (745,000 awards outstanding at a weighted average exercise price of €40.60 (\$44.12)), (iii) performance-based share award (82,747 awards outstanding) and (iv) an employee share purchase plan. During 2013, Telenet modified the terms of certain of its share-based incentive plans to provide for anti-dilution adjustments in connection with its shareholder returns. In connection with these anti-dilution adjustments, Telenet recognized share-based compensation expense of \$32.7 million and continues to recognize additional share-based compensation expense as the underlying options vest. In addition, during 2013, Telenet recognized expense of \$6.2 million related to the accelerated vesting of certain options.
- (e) The amount for 2015 includes the reversal of \$1.8 million of share-based compensation expense, primarily related to forfeitures of unvested PSUs during the first quarter of 2015.

The following table provides certain information related to share-based compensation not yet recognized for share-based incentive awards related to Liberty Global ordinary shares as of December 31, 2015:

	( Sha	iberty Global ares and C Shares (a)	G perfo	berty lobal ormance- awards (b)
Total compensation expense not yet recognized (in millions)	\$	192.0	\$	85.5

<sup>(</sup>a) Amounts relate to awards granted or assumed by Liberty Global under (i) the Liberty Global 2014 Incentive Plan (as amended and restated effective February 24, 2015), (ii) the Liberty Global 2014 Nonemployee Director Incentive Plan, (iii) the Liberty Global, Inc. 2005 Incentive Plan (as amended and restated effective June 7, 2013) (the Liberty Global 2005 Incentive Plan), (iv) the Liberty Global, Inc. 2005 Nonemployee Director Incentive Plan (as amended and restated effective June 7, 2013) (the Liberty Global 2005 Director Incentive Plan) and (v) certain other incentive plans of Virgin Media, including Virgin Media's 2010 stock incentive plan (the VM Incentive Plan). All new awards are granted under the Liberty Global 2014 Incentive Plan or the Liberty Global 2014 Nonemployee Director Incentive Plan. The Liberty Global 2014

### Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Incentive Plan, the Liberty Global 2014 Nonemployee Director Incentive Plan, the Liberty Global 2005 Incentive Plan, the Liberty Global 2005 Director Incentive Plan and the VM Incentive Plan are described below.

(b) Amounts relate to (i) the Challenge Performance Awards, (ii) PSUs and (iii) the PGUs.

The following table summarizes certain information related to the incentive awards granted and exercised with respect to Liberty Global ordinary shares:

	Ye	ar end	ed Decembe	r 31,	
	2015		2014		2013
Assumptions used to estimate fair value of options, SARs and PSARs granted:					
Risk-free interest rate	0.96 - 1.89%	0.8	1 - 1.77%	0.3	36 - 1.27%
Expected life (a)	3.0 - 5.5 years	3.1	- 5.1 years	3.2	- 7.1 years
Expected volatility (a)	23.1 - 30.1%	25.	.1 - 28.7%	26	5.5 - 35.8%
Expected dividend yield	none		none		none
Weighted average grant date fair value per share of awards granted:					
Options	\$ 14.73	\$	11.40	\$	11.09
SARs	\$ 10.76	\$	8.93	\$	8.36
PSARs	\$ —	\$	8.15	\$	8.31
RSUs	\$ 51.85	\$	40.68	\$	35.74
PSUs	\$ 51.57	\$	40.42	\$	34.94
PGUs	\$ —	\$	44.04	\$	_
Total intrinsic value of awards exercised (in millions):					
Options	\$ 106.8	\$	126.6	\$	175.0
SARs	\$ 51.7	\$	48.7	\$	73.2
PSARs	\$ 0.2	\$	0.4	\$	_
Cash received from exercise of options (in millions)	\$ 40.5	\$	54.8	\$	81.0
Income tax benefit related to share-based compensation (in millions)	\$ 67.4	\$	54.6	\$	48.0

<sup>(</sup>a) The 2013 ranges shown for these assumptions exclude the awards for certain former employees of Virgin Media who were expected to exercise their awards immediately or soon after the Virgin Media Acquisition. For these awards, the assumptions used for expected life and volatility were essentially nil.

#### Share Incentive Plans — Liberty Global Ordinary Shares

Incentive Plans

As of December 31, 2015, we are authorized to grant incentive awards under the Liberty Global 2014 Incentive Plan and the Liberty Global 2014 Nonemployee Director Incentive Plan. Generally, we may grant non-qualified share options, SARs, restricted shares, RSUs, cash awards, performance awards or any combination of the foregoing under either of these incentive plans (collectively, awards). Ordinary shares issuable pursuant to awards made under these incentive plans will be made available from either authorized but unissued shares or shares that have been issued but reacquired by our company. Awards may be granted at or above fair value in any class of ordinary shares. The maximum number of Liberty Global ordinary shares with respect to which awards may be issued under the Liberty Global 2014 Incentive Plan and the Liberty Global 2014 Nonemployee Director Incentive Plan is 105 million (of which no more than 50.25 million shares may consist of Class B ordinary shares) and 10.5 million, respectively, in each case, subject to anti-dilution and other adjustment provisions in the respective plan. As of December 31, 2015, the Liberty Global 2014 Incentive Plan and the Liberty Global 2014 Nonemployee Director Incentive Plan had 84,782,474 and 10,120,239 ordinary shares available for grant, respectively.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

In connection with the Virgin Media Acquisition, we assumed the VM Incentive Plan. Awards under the VM Incentive Plan issued prior to June 7, 2013 have a 10-year term and become fully exercisable within five years of continued employment. Certain performance-based awards that were granted during the first quarter of 2013 were canceled upon completion of the Virgin Media Acquisition. These canceled awards were subsequently replaced by PSUs that were granted under the VM Incentive Plan on June 24, 2013. For the remaining performance-based awards that were outstanding prior to June 7, 2013, the performance objectives lapsed upon the completion of the Virgin Media Acquisition and such awards vest on the third anniversary of the grant date.

Awards (other than performance-based awards) issued under the Liberty Global 2005 Incentive Plan and under the VM Incentive Plan after June 7, 2013 generally (i) vest 12.5% on the six month anniversary of the grant date and then vest at a rate of 6.25% each quarter thereafter and (ii) expire seven years after the grant date. Awards (other than RSUs) issued under the Liberty Global 2005 Director Incentive Plan generally vest in three equal annual installments, provided the director continues to serve as director immediately prior to the vesting date, and expire 10 years after the grant date. RSUs vest on the date of the first annual general meeting of shareholders following the grant date. No further awards will be granted under the Liberty Global 2005 Incentive Plan, the Liberty Global 2005 Director Incentive Plan or the VM Incentive Plan.

Awards (other than performance-based awards) under the Liberty Global 2014 Incentive Plan generally (i) vest 12.5% on the six month anniversary of the grant date and then vest at a rate of 6.25% each quarter thereafter and (ii) expire seven years after the grant date. Awards (other than RSUs) issued under the Liberty Global 2014 Nonemployee Director Incentive Plan generally vest in three equal annual installments, provided the director continues to serve as director immediately prior to the vesting date, and expire seven years after the grant date. RSUs vest on the date of the first annual general meeting of shareholders following the grant date. These awards may be granted at or above fair value in any class of ordinary shares.

### Performance Awards

The following is a summary of the material terms and conditions with respect to our performance-based awards for certain executive officers and key employees. These awards were granted under the Liberty Global 2014 Incentive Plan, the Liberty Global 2005 Incentive Plan and the VM Incentive Plan.

Liberty Global PSUs. PSUs are granted to executive officers and key employees annually based on a target annual equity value for each executive and key employee, of which approximately two-thirds would be delivered in the form of an annual award of PSUs and approximately one-third in the form of an annual award of SARs. Each currently-outstanding PSU represents the right to receive one Liberty Global or LiLAC Class A or Class C ordinary share, as applicable, subject to performance and vesting. Generally, the performance period for the PSUs covers a two-year period and the performance target is based on the achievement of a specified compound annual growth rate (CAGR) in a consolidated Adjusted OIBDA metric (as defined in note 18), adjusted for events such as acquisitions, dispositions and changes in foreign currency exchange rates that affect comparability (Adjusted OIBDA CAGR), and the participant's annual performance ratings during the two-year performance period. A performance range of 75% to 125% of the target Adjusted OIBDA CAGR generally results in award recipients earning 50% to 150% of their respective PSUs, subject to reduction or forfeiture based on individual performance. The PSUs generally vest 50% on each of March 31 and September 30 of the year following the end of the performance period.

Subsequent to December 31, 2015, the compensation committee of our board of directors approved the grant of up to 6.26 million PSU awards pursuant to a performance plan that is based on the achievement of a specified Adjusted OIBDA CAGR during the three-year period ended December 31, 2018 (with 2015 as the base year). We expect that over 95% of these awards will cover Liberty Global Shares and the remainder will cover LiLAC Shares.

Liberty Global Challenge Performance Awards. Effective June 24, 2013, our compensation committee approved the Challenge Performance Awards, which consisted solely of PSARs for our senior executive officers and a combination of PSARs and PSUs for our other executive officers and key employees. Each PSU represents the right to receive one Liberty Global or LiLAC Class A or Class C ordinary share, as applicable, subject to performance and vesting. The performance criteria for the Challenge Performance Awards will be based on the participant's performance and achievement of individual goals in each of the years 2013, 2014 and 2015. Subject to forfeitures and the satisfaction of performance conditions, 100% of each participant's Challenge Performance Awards will vest on June 24, 2016. The PSARs have a term of seven years and base prices equal to the respective market closing prices of the applicable class on the grant date.

### Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Liberty Global Performance Grant Award. Effective May 1, 2014, our compensation committee authorized the grant of PGUs to our Chief Executive Officer, comprising a total of one million PGUs with respect to Class A Old Liberty Global Shares and one million PGUs with respect to Class B Old Liberty Global Shares. The PGUs, which were subject to a performance condition that was achieved in 2014, vest in three equal annual installments, the first of which occurred on March 15, 2015. As a result of the LiLAC Transaction, our Chief Executive Officer also received 33,333 PGUs with respect to Class A LiLAC Shares and 33,333 PGUs with respect to Class B LiLAC Shares, each of which vest over the same period as the May 1, 2014 award grant described above.

# Share-based Award Activity — Liberty Global Ordinary Shares

The following tables summarize the share-based award activity during 2015 with respect to awards issued by Liberty Global:

# Liberty Global Shares and Old Liberty Global Shares

Number of shares		average	Weighted average remaining contractual term	int	regate rinsic alue
		_	in years	in n	nillions
1,726,259	\$	18.01			
61,763	\$	54.97			
(13,836)	\$	23.59			
(920,468)	\$	14.03			
853,718	\$	24.90			
60,414		(2.32)			
914,132	\$	22.58			
(7,718)	\$	22.61			
(33,081)	\$	15.19			
873,333	\$	22.85	5.2	\$	17.5
414,553	\$	16.53	3.7	\$	10.7
	_				
Number of shares		Veighted average ercise price	Weighted average remaining contractual term	int	regate rinsic alue
Number of shares		average ercise price	average remaining contractual	int v	rinsic
Number of shares 3,946,192		average	average remaining contractual term	int v	rinsic alue
Number of shares 3,946,192 622,301	**************************************	average ercise price  17.67 43.34	average remaining contractual term	int v	rinsic alue
Number of shares  3,946,192 622,301 (34,493)	\$ \$ \$	17.67 43.34 22.23	average remaining contractual term	int v	rinsic alue
Number of shares 3,946,192 622,301	\$ \$ \$	average ercise price  17.67 43.34	average remaining contractual term	int v	rinsic alue
Number of shares  3,946,192 622,301 (34,493)	\$ \$ \$	17.67 43.34 22.23	average remaining contractual term	int v	rinsic alue
Number of shares  3,946,192 622,301 (34,493) (1,613,927)	\$ \$ \$ \$ \$	17.67 43.34 22.23 14.99	average remaining contractual term	int v	rinsic alue
Number of shares  3,946,192 622,301 (34,493) (1,613,927) 2,920,073	\$ \$ \$ \$ \$	17.67 43.34 22.23 14.99 24.57	average remaining contractual term	int v	rinsic alue
Number of shares  3,946,192 622,301 (34,493) (1,613,927) 2,920,073 204,344	\$ \$ \$ \$ \$ \$	17.67 43.34 22.23 14.99 24.57 (2.24)	average remaining contractual term	int v	rinsic alue
Number of shares  3,946,192 622,301 (34,493) (1,613,927) 2,920,073 204,344 3,124,417	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	17.67 43.34 22.23 14.99 24.57 (2.24) 22.33	average remaining contractual term	int v	rinsic alue
Number of shares  3,946,192 622,301 (34,493) (1,613,927) 2,920,073 204,344 3,124,417 (41,208)	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	17.67 43.34 22.23 14.99 24.57 (2.24) 22.33 29.99	average remaining contractual term	int v	rinsic alue
	1,726,259 61,763 (13,836) (920,468) 853,718 60,414 914,132 (7,718) (33,081) 873,333	Number of shares         exection           1,726,259         \$           61,763         \$           (13,836)         \$           (920,468)         \$           853,718         \$           60,414         \$           (7,718)         \$           (33,081)         \$           873,333         \$	shares         exercise price           1,726,259         \$ 18.01           61,763         \$ 54.97           (13,836)         \$ 23.59           (920,468)         \$ 14.03           853,718         \$ 24.90           60,414         (2.32)           914,132         \$ 22.58           (7,718)         \$ 22.61           (33,081)         \$ 15.19           873,333         \$ 22.85	Number of shares         Weighted average exercise price         average remaining contractual term           1,726,259         \$ 18.01           61,763         \$ 54.97           (13,836)         \$ 23.59           (920,468)         \$ 14.03           853,718         \$ 24.90           60,414         (2.32)           914,132         \$ 22.58           (7,718)         \$ 22.61           (33,081)         \$ 15.19           873,333         \$ 22.85           5.2	Number of shares         Weighted average exercise price         average remaining term         Agg int volume           1,726,259         \$ 18.01         in years         in n           61,763         \$ 54.97         (13,836)         \$ 23.59           (920,468)         \$ 14.03         853,718         \$ 24.90           60,414         (2.32)           914,132         \$ 22.58           (7,718)         \$ 22.61           (33,081)         \$ 15.19           873,333         \$ 22.85         5.2

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

# ${\it Liberty~Global~Shares~-continued:}$

SARs — Class A ordinary shares	Number of shares	Weighted average base price	Weighted average remaining contractual term	in	gregate trinsic value
			in years	in r	nillions
Outstanding at January 1, 2015	5,607,988	\$ 31.07			
Granted	2,252,602	\$ 53.11			
Forfeited	(106,696)	\$ 37.27			
Exercised	(354,800)	\$ 25.68			
Outstanding at June 30, 2015	7,399,094	\$ 37.95			
Impact of Award Modifications	527,825	(3.36)			
Outstanding at July 1, 2015	7,926,919	\$ 34.59			
Granted	70,845	\$ 51.21			
Forfeited	(99,761)	\$ 41.67			
Exercised	(204,851)	\$ 25.40			
Outstanding at December 31, 2015	7,693,152	\$ 34.89	4.6	\$	72.2
Exercisable at December 31, 2015	3,642,857	\$ 26.56	3.4	\$	59.3
SARs — Class C ordinary shares	Number of shares	Weighted average base price	Weighted average remaining contractual term	in	gregate trinsic value
			in years	in 1	nillions
Outstanding at January 1, 2015	, ,	\$ 28.49			
Granted	4,505,204	\$ 51.41			
Forfeited	(262,502)	\$ 34.80			
Exercised	(1,062,945)	\$ 23.48			
Outstanding at June 30, 2015	17,868,802	\$ 34.47			
Impact of Award Modifications	1,250,817	(2.94)			
Outstanding at July 1, 2015	19,119,619	\$ 31.53			
Granted	141,690	\$ 48.11			
Forfeited	(217,585)	\$ 38.57			
Exercised	(358,377)	\$ 25.17			
Outstanding at December 31, 2015	18,685,347	\$ 31.70	4.3	\$	199.9
Exercisable at December 31, 2015	10,003,440	\$ 24.31	3.2	\$	168.3

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

# Liberty Global Shares and Old Liberty Global Shares — continued:

PSARs — Class A ordinary shares	Number of shares		Weighted average oase price	Weighted average remaining contractual term	int	gregate rinsic alue
	_			in years	in n	nillions
Outstanding at January 1, 2015	2,788,749	\$	35.10			
Forfeited	(35,625)	\$	35.03			
Exercised	(4,166)	\$	35.03			
Outstanding at June 30, 2015	2,748,958	\$	35.10			
Impact of Award Modifications	142,250		(3.17)			
Outstanding at July 1, 2015	2,891,208	\$	31.93			
Forfeited	(1,751)	\$	31.87			
Outstanding at December 31, 2015	2,889,457	\$	31.93	4.5	\$	30.1
Exercisable at December 31, 2015	14,602	\$	31.87	1.4	\$	0.2
PSARs — Class C ordinary shares	Number of shares		Weighted average oase price	Weighted average remaining contractual term	int	gregate crinsic alue
PSARs — Class C ordinary shares			average	average remaining contractual	int v	rinsic
PSARs — Class C ordinary shares  Outstanding at January 1, 2015	shares		average	average remaining contractual term	int v	rinsic alue
<u> </u>	8,366,248		average pase price	average remaining contractual term	int v	rinsic alue
Outstanding at January 1, 2015	8,366,248 (106,875)	\$ \$	average pase price  33.48	average remaining contractual term	int v	rinsic alue
Outstanding at January 1, 2015	8,366,248 (106,875) (12,499)	\$ \$	average base price  33.48  33.41	average remaining contractual term	int v	rinsic alue
Outstanding at January 1, 2015  Forfeited  Exercised	8,366,248 (106,875) (12,499) 8,246,874	\$ \$ \$	33.48 33.41 33.41	average remaining contractual term	int v	rinsic alue
Outstanding at January 1, 2015  Forfeited  Exercised  Outstanding at June 30, 2015	8,366,248 (106,875) (12,499) 8,246,874 387,836	\$ \$ \$	33.48 33.41 33.41 33.48	average remaining contractual term	int v	rinsic alue
Outstanding at January 1, 2015  Forfeited  Exercised  Outstanding at June 30, 2015  Impact of Award Modifications	8,366,248 (106,875) (12,499) 8,246,874 387,836 8,634,710	\$ \$ \$ \$	33.48 33.41 33.41 33.42 (2.96)	average remaining contractual term	int v	rinsic alue
Outstanding at January 1, 2015  Forfeited  Exercised  Outstanding at June 30, 2015  Impact of Award Modifications  Outstanding at July 1, 2015	8,366,248 (106,875) (12,499) 8,246,874 387,836 8,634,710 (5,229)	\$ \$ \$ \$	33.48 33.41 33.41 33.48 (2.96) 30.52	average remaining contractual term	int v	rinsic alue

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

# Liberty Global Shares and Old Liberty Global Shares — continued:

RSUs — Class A ordinary shares	Number of shares	gr fa	Veighted nverage rant date nir value er share	Weighted average remaining contractual term
				in years
Outstanding at January 1, 2015	565,270	\$	38.27	
Granted	298,713	\$	53.11	
Forfeited	(18,827)	\$	37.52	
Released from restrictions	(205,540)	\$	37.16	
Outstanding at June 30, 2015	639,616	\$	45.58	
Impact of Award Modifications	30,748		(2.17)	
Outstanding at July 1, 2015	670,364	\$	43.41	
Granted	13,890	\$	52.46	
Forfeited	(21,544)	\$	43.61	
Released from restrictions	(97,734)	\$	40.93	
Outstanding at December 31, 2015	564,976	\$	44.06	3.4
RSUs — Class C ordinary shares	Number of shares	a gr fa	Veighted average rant date air value er share	Weighted average remaining contractual term
RSUs — Class C ordinary shares	Number of	a gr fa	overage ant date air value	average remaining contractual
	Number of	a gr fa	overage ant date air value	average remaining contractual term
RSUs — Class C ordinary shares	Number of shares	gr fa p	rant date ant date air value er share	average remaining contractual term
RSUs — Class C ordinary shares  Outstanding at January 1, 2015	Number of shares	gr fa p	average rant date air value er share	average remaining contractual term
RSUs — Class C ordinary shares  Outstanding at January 1, 2015	Number of shares  1,387,003 597,426	gr fa p	average rant date air value er share 35.59 51.40	average remaining contractual term
RSUs — Class C ordinary shares  Outstanding at January 1, 2015  Granted  Forfeited	Number of shares  1,387,003 597,426 (45,611)	gr fa p	average rant date air value er share  35.59 51.40 34.70	average remaining contractual term
RSUs — Class C ordinary shares  Outstanding at January 1, 2015  Granted  Forfeited  Released from restrictions	Number of shares  1,387,003 597,426 (45,611) (553,929)	gr fa p'	35.59 51.40 34.70 34.55	average remaining contractual term
RSUs — Class C ordinary shares  Outstanding at January 1, 2015  Granted  Forfeited  Released from restrictions  Outstanding at June 30, 2015	Number of shares  1,387,003 597,426 (45,611) (553,929) 1,384,889	gr fa p'	35.59 51.40 34.70 34.55 42.85	average remaining contractual term
RSUs — Class C ordinary shares  Outstanding at January 1, 2015  Granted  Forfeited  Released from restrictions  Outstanding at June 30, 2015  Impact of Award Modifications	Number of shares  1,387,003 597,426 (45,611) (553,929) 1,384,889 67,240	\$ \$ \$ \$ \$	35.59 51.40 34.70 34.55 42.85 (1.74)	average remaining contractual term
RSUs — Class C ordinary shares  Outstanding at January 1, 2015  Granted  Forfeited  Released from restrictions  Outstanding at June 30, 2015  Impact of Award Modifications  Outstanding at July 1, 2015	Number of shares  1,387,003 597,426 (45,611) (553,929) 1,384,889 67,240 1,452,129	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	35.59 51.40 34.70 34.55 42.85 (1.74) 41.11	average remaining contractual term
RSUs — Class C ordinary shares  Outstanding at January 1, 2015  Granted  Forfeited  Released from restrictions  Outstanding at June 30, 2015  Impact of Award Modifications  Outstanding at July 1, 2015  Granted	Number of shares  1,387,003 597,426 (45,611) (553,929) 1,384,889 67,240 1,452,129 27,780	s s s s s s	35.59 51.40 34.70 34.55 42.85 (1.74) 49.14	average remaining contractual term

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

# Liberty Global Shares and Old Liberty Global Shares — continued:

PSUs and PGUs — Class A ordinary shares	Number of shares	Weighted average grant date fair value per share		Weighted average remaining contractual term
				in years
Outstanding at January 1, 2015	1,989,693	\$	41.34	
Granted	410,716	\$	52.82	
Performance adjustment (a)	50,410	\$	37.31	
Forfeited	(22,619)	\$	38.47	
Released from restrictions	(543,707)	\$	41.12	
Outstanding at June 30, 2015	1,884,493	\$	43.84	
Impact of Award Modifications	1,185		(2.10)	
Outstanding at July 1, 2015	1,885,678	\$	41.74	
Granted	15,410	\$	52.46	
Forfeited	(3,054)	\$	38.66	
Released from restrictions	(207,834)	\$	35.54	
Outstanding at December 31, 2015	1,690,200	\$	42.61	1.2
PGUs — Class B ordinary shares	Number of shares	a gr fa	eighted everage ant date ir value er share	Weighted average remaining contractual term
				in years
Outstanding at January 1, 2015	1,000,000	\$	44.55	
Released from restrictions	(333,333)	\$	44.55	
Outstanding at June 30, 2015	666,667	\$	44.55	
Impact of Award Modifications			(2.12)	
Outstanding at July 1 and December 31, 2015	666,667	\$	42.43	1.2

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Liberty Global Shares and Old Liberty Global Shares — continued:

PSUs — Class C ordinary shares	Number of shares	Weighted average grant date fair value per share		Weighted average remaining contractual term
				in years
Outstanding at January 1, 2015	2,442,767	\$	36.71	
Granted	821,432	\$	51.12	
Performance adjustment (a)	147,179	\$	34.80	
Forfeited	(58,997)	\$	36.02	
Released from restrictions	(614,341)	\$	34.80	
Outstanding at June 30, 2015	2,738,040	\$	41.38	
Impact of Award Modifications	3,126		(1.98)	
Outstanding at July 1, 2015	2,741,166	\$	39.40	
Granted	30,820	\$	49.14	
Forfeited	(6,292)	\$	36.74	
Released from restrictions	(607,343)	\$	33.15	
Outstanding at December 31, 2015	2,158,351	\$	41.30	1.1

<sup>(</sup>a) Represents the increase in PSUs associated with the first quarter 2015 determination that 113.6% of the PSUs that were granted in 2013 (the 2013 PSUs) had been earned. As of December 31, 2015, all of the earned 2013 PSUs have been released from restrictions.

# LiLAC Shares

Number of shares	a	verage	Weighted average remaining contractual term	intr	regate insic llue
			in years	in m	illions
_	\$				
21,233		24.29			
21,233	\$	24.29	4.1	\$	0.4
14,145	\$	16.12	3.2	\$	0.4
Number of shares	a	verage	Weighted average remaining contractual term	intr	regate insic llue
			in years	in m	illions
	\$	_			
57,742		22.42			
57,742	\$	22.42	3.8	\$	1.2
42,321	\$	15 97	2 1	Φ	1 1
	Columber of shares	Number of shares	shares         exercise price           —         \$         —           21,233         24.29           21,233         \$         24.29           14,145         \$         16.12           Weighted average exercise price           —         \$         —           57,742         22.42           57,742         \$         22.42           \$         2.242	Number of shares         Weighted average exercise price         average remaining contractual term           —         \$         —           21,233         24.29         4.1           14,145         \$         16.12         3.2           Number of shares         Weighted average exercise price         Weighted average remaining contractual term in years           —         \$         —           57,742         22.42           57,742         \$         22.42           57,742         \$         22.42           57,742         \$         22.42           3.8	Number of shares         Weighted average exercise price         average remaining contractual term         Aggin introval in years           —         \$ —           21,233         24.29           21,233         \$ 24.29           14,145         \$ 16.12           3.2         \$           Number of shares         Weighted average exercise price         Weighted average remaining contractual term         Aggin introval in years           —         \$ —           57,742         22.42           57,742         \$ 22.42           3.8         \$

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

# LiLAC Shares — continued:

SARs — Class A ordinary shares	S A ordinary shares  Weighted average shares base price				Aggregate intrinsic value		
				in years	in n	nillions	
Outstanding at January 1, 2015	_	\$	_				
Impact of Award Modifications	223,823		30.54				
Outstanding at July 1, 2015	223,823	\$	30.54				
Granted	10,107	\$	42.76				
Forfeited	(381)	\$	32.76				
Exercised	(357)	\$	28.19				
Outstanding at December 31, 2015	233,192	\$	31.07	4.4	\$	2.6	
Exercisable at December 31, 2015	122,905	\$	23.93	3.3	\$	2.2	
SARs — Class C ordinary shares	Number of shares		Weighted average oase price	Weighted average remaining contractual term	int	regate rinsic alue	
				in years	in m	illions	
Outstanding at January 1, 2015	_	\$					
Impact of Award Modifications	560,844		29.27				
Outstanding at July 1, 2015	560,844	\$	29.27				
Granted	20,214	\$	42.55				
Forfeited	(909)	\$	32.38				
Exercised	(876)	\$	27.26				
Outstanding at December 31, 2015	579,273	\$	29.73	4.1	\$	8.0	
Exercisable at December 31, 2015	339,951	\$	23.28	3.1	\$	6.7	
PSARs — Class A ordinary shares	Number of shares		Weighted average pase price	Weighted average remaining contractual term	int	regate rinsic alue	
				in years	in m	illions	
Outstanding at January 1, 2015	_	\$	_				
Impact of Award Modifications	140,215		30.08				
Outstanding at July 1, 2015	140,215	\$	30.08				
Forfeited	(88)	\$	30.02				
Outstanding at December 31, 2015	140,127	\$	30.08	4.5	\$	1.6	
Exercisable at December 31, 2015	305	\$	30.02	1.8	\$		

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

# LiLAC Shares — continued:

PSARs — Class C ordinary shares	Number of shares	Weighted average base price		Weighted average remaining contractual term	Aggregate intrinsic value	
				in years	in millions	
Outstanding at January 1, 2015	_	\$		·		
Impact of Award Modifications	418,753	30.	.30			
Outstanding at July 1, 2015	418,753	\$ 30.	.30	•		
Forfeited	(261)	\$ 30.	.23			
Outstanding at December 31, 2015	418,492	\$ 30.	.30	4.5	\$ 5.3	
Exercisable at December 31, 2015	913	\$ 30.	.23	1.8	<u></u> \$ —	
RSUs — Class A ordinary shares		Number of shares		Weighted average grant date fair value per share	Weighted average remaining contractual term	
					in years	
Outstanding at January 1, 2015		_	\$	_		
Impact of Award Modifications	_	397		52.94		
Outstanding at July 1, 2015		397	\$	52.94		
Granted		1,316	\$	42.76		
Outstanding at December 31, 2015		1,713	\$	45.12	3.0	
RSUs — Class C ordinary shares		Number of shares		Weighted average grant date fair value per share	Weighted average remaining contractual term	
					in years	
Outstanding at January 1, 2015			\$			
			Φ			
Impact of Award Modifications		796	Ф	48.68		
Impact of Award Modifications.  Outstanding at July 1, 2015		796 796	\$			
Outstanding at July 1, 2015  Granted				48.68		
Outstanding at July 1, 2015		796	\$	48.68 42.55	3.0	
Outstanding at July 1, 2015		796 2,632	\$ \$ \$	48.68 42.55	3.0  Weighted average remaining contractual term	
Outstanding at July 1, 2015  Granted  Outstanding at December 31, 2015  PSUs and PGUs — Class A ordinary shares		796 2,632 3,428 Number of	\$ \$ \$	48.68 42.55 43.97 Weighted average grant date fair value	Weighted average remaining contractual	
Outstanding at July 1, 2015  Granted  Outstanding at December 31, 2015  PSUs and PGUs — Class A ordinary shares  Outstanding at January 1, 2015	=	796 2,632 3,428 Number of shares	\$ \$ \$	48.68 42.55 43.97 Weighted average grant date fair value per share	Weighted average remaining contractual term	
Outstanding at July 1, 2015  Granted  Outstanding at December 31, 2015  PSUs and PGUs — Class A ordinary shares  Outstanding at January 1, 2015  Impact of Award Modifications	=	796 2,632 3,428  Number of shares  — 92,932	\$ \$ \$ \$	48.68 42.55 43.97  Weighted average grant date fair value per share  41.85	Weighted average remaining contractual term	
Outstanding at July 1, 2015  Granted  Outstanding at December 31, 2015  PSUs and PGUs — Class A ordinary shares  Outstanding at January 1, 2015  Impact of Award Modifications  Outstanding at July 1, 2015	=	796 2,632 3,428  Number of shares  — 92,932 92,932	\$ \$ \$ \$	48.68 42.55 43.97  Weighted average grant date fair value per share  41.85 41.85	Weighted average remaining contractual term	
Outstanding at July 1, 2015 Granted Outstanding at December 31, 2015  PSUs and PGUs — Class A ordinary shares  Outstanding at January 1, 2015 Impact of Award Modifications Outstanding at July 1, 2015 Granted		796 2,632 3,428  Number of shares  — 92,932	\$ \$ \$ \$	48.68 42.55 43.97  Weighted average grant date fair value per share  41.85 41.85 42.76	Weighted average remaining contractual term	
Outstanding at July 1, 2015  Granted  Outstanding at December 31, 2015  PSUs and PGUs — Class A ordinary shares  Outstanding at January 1, 2015  Impact of Award Modifications  Outstanding at July 1, 2015  Granted  Forfeited	=	796 2,632 3,428  Number of shares  — 92,932 92,932	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	48.68 42.55 43.97  Weighted average grant date fair value per share  41.85 41.85	Weighted average remaining contractual term	
Outstanding at July 1, 2015 Granted Outstanding at December 31, 2015  PSUs and PGUs — Class A ordinary shares  Outstanding at January 1, 2015 Impact of Award Modifications Outstanding at July 1, 2015 Granted	=	796 2,632 3,428  Number of shares  92,932 92,932 3,007	\$ \$ \$ \$ \$ \$ \$ \$ \$	48.68 42.55 43.97 Weighted average grant date fair value per share  41.85 41.85 42.76 38.63	Weighted average remaining contractual term	

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

#### LiLAC Shares — continued:

PGUs — Class B ordinary shares	Number of shares	gr fa	Veighted average ant date air value er share	Weighted average remaining contractual term
				in years
Outstanding at January 1, 2015		\$		
Impact of Award Modifications	33,333		42.43	
Outstanding at July 1 and December 31, 2015	33,333	\$	42.43	1.2
PSUs — Class C ordinary shares	Number of shares	a gr fa	Veighted average ant date air value er share	Weighted average remaining contractual term
				in years
Outstanding at January 1, 2015		\$		
Impact of Award Modifications	133,609		39.59	
Outstanding at July 1, 2015	133,609	\$	39.59	
Granted	6,014	\$	42.55	
Forfeited	(317)	\$	36.70	
Released from restrictions.	(28,091)	\$	33.26	
Outstanding at December 31, 2015	111,215	\$	41.36	1.1

# (14) Restructuring Liabilities

A summary of changes in our restructuring liabilities during 2015 is set forth in the table below:

	Employee severance and termination		severance and		Office closures		Contract terminatio and other		Total
				in m	illions				
Restructuring liability as of January 1, 2015	\$	27.6	\$	12.5	\$	116.0	\$ 156.1		
Restructuring charges (credits)		102.3		(0.8)		2.3	103.8		
Cash paid		(67.9)		(5.8)		(29.4)	(103.1)		
Foreign currency translation adjustments and other		6.5		1.4		(18.2)	(10.3)		
Restructuring liability as of December 31, 2015	\$	68.5	\$	7.3	\$	70.7	\$ 146.5		
Current portion	\$	63.7	\$	1.2	\$	34.1	\$ 99.0		
Noncurrent portion		4.8		6.1		36.6	47.5		
Total	\$	68.5	\$	7.3	\$	70.7	\$ 146.5		

Our restructuring charges during 2015 included (i) employee severance and termination costs related to certain reorganization and integration activities of \$61.8 million in the Netherlands, \$20.9 million in U.K./Ireland, \$9.7 million in Germany, \$3.5 million in Switzerland/Austria and \$2.6 million in Puerto Rico, (ii) contract termination charges of \$8.1 million in Belgium, \$6.0 million in Chile and \$4.5 million in Puerto Rico and (iii) a credit of \$17.0 million recorded by Telenet during the fourth quarter following the settlement of its digital terrestrial television (**DTT**) capacity contract obligations, the fair value of which were originally recorded during 2014 when Telenet discontinued the provision of DTT services.

## Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

We expect to record significant restructuring charges during 2016, due largely to our ongoing company-wide effort to optimize our operating model. In addition, we expect to undertake restructuring programs in certain of our operating segments, including programs to be undertaken in connection with the integration of acquired entities.

A summary of changes in our restructuring liabilities during 2014 is set forth in the table below:

	Employee severance and termination		Office closures		Contract mination	Total
				in m		
Restructuring liability as of January 1, 2014	\$	26.6	\$	14.9	\$ 72.0	\$ 113.5
Restructuring charges		60.4		9.5	97.0	166.9
Cash paid		(66.3)		(10.8)	(34.4)	(111.5)
Ziggo liability at acquisition date		8.2		_	_	8.2
Foreign currency translation adjustments and other		(1.3)		(1.1)	(18.6)	(21.0)
Restructuring liability as of December 31, 2014	\$	27.6	\$	12.5	\$ 116.0	\$ 156.1
Current portion	\$	27.5	\$	4.4	\$ 20.4	\$ 52.3
Noncurrent portion		0.1		8.1	95.6	103.8
Total	\$	27.6	\$	12.5	\$ 116.0	\$ 156.1

Prior to March 31, 2014, Telenet operated a DTT business that served a limited number of subscribers. The DTT network was accessed by Telenet pursuant to third-party capacity contracts that were accounted for as operating agreements. On March 31, 2014, Telenet discontinued the provision of DTT services and, accordingly, recorded an \$86.1 million restructuring charge during the three months ended March 31, 2014. This charge was equal to the then fair value of the remaining payments due under the DTT capacity contracts.

Our restructuring charges during 2014 also included \$17.5 million, \$11.2 million, \$10.7 million, \$10.1 million and \$9.8 million of employee severance and termination costs related to reorganization and integration activities, primarily in U.K./Ireland, the Netherlands, Germany, Chile and the European Operations Division's central operations, respectively.

A summary of changes in our restructuring liabilities during 2013 is set forth in the table below:

	Employee severance and termination		Office losures	_	Contract termination ons		Total
Restructuring liability as of January 1, 2013	\$	39.7	\$ 4.0	\$	13.1	\$	56.8
Restructuring charges		77.9	(0.1)		100.9		178.7
Cash paid		(91.5)	(14.1)		(17.6)		(123.2)
Virgin Media liability at acquisition date		0.1	23.3				23.4
Foreign currency translation adjustments and other		1.2	1.8		(11.4)		(8.4)
Reclassification of Chellomedia Disposal Group to discontinued operations		(0.8)			(13.0)		(13.8)
Restructuring liability as of December 31, 2013	\$	26.6	\$ 14.9	\$	72.0	\$	113.5

As further described in note 9, we recorded restructuring charges totaling \$84.9 million during the third and fourth quarters of 2013 as a result of VTR's decision to cease commercial use of its mobile network. These restructuring charges included the fair value of (i) the then remaining payments due under VTR's tower and real estate operating leases of \$71.5 million and (ii) certain other required payments associated with VTR's mobile network. In addition, our restructuring charges during 2013 included

## Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

\$46.1 million, \$14.1 million and \$8.1 million of employee severance and termination costs related to reorganization and integration activities in U.K./Ireland, Germany and Chile, respectively.

#### (15) Defined Benefit Plans

Certain of our subsidiaries in Europe maintain various funded and unfunded defined benefit plans for their employees. A significant portion of these defined benefit plans are closed to new entrants and existing participants do not accrue any additional benefits.

The table below provides summary information on our defined benefit plans:

	Year ended December 31,									
		2015		2014		2013				
			in	millions						
Projected benefit obligation	\$	1,188.3	\$	1,247.6	\$	1,163.0				
Fair value of plan assets (a)	\$	1,092.6	\$	1,122.7	\$	1,057.0				
Net liability	\$	95.7	\$	124.9	\$	106.0				
Net periodic pension cost (b)	\$	11.8	\$	9.6	\$	21.5				

<sup>(</sup>a) The fair value of plan assets is primarily based on Level 1 inputs of the fair value hierarchy (as further described in note 8). Our plan assets comprise investments in debt securities, equity securities, hedge funds, insurance contracts and certain other assets.

Based on December 31, 2015 exchange rates and information available as of that date, our subsidiaries' contributions to their respective defined benefit plans in 2016 are expected to aggregate \$56.0 million.

## (16) Accumulated Other Comprehensive Earnings

Accumulated other comprehensive earnings included in our consolidated balance sheets and statements of equity reflect the aggregate impact of foreign currency translation adjustments and pension-related adjustments and other. The changes in the components of accumulated other comprehensive earnings, net of taxes, are summarized as follows:

		Liber	ty Gl	obal shareho	<u> </u>					
	tr	currency related translation adjustments co adjustments and other		currency related translation adjustments			con	ccumulated other nprehensive earnings	Non- controlling interests	Total ccumulated other mprehensive earnings
					ii	n millions				
Balance at January 1, 2013	\$	1,604.1	\$	(3.6)	\$	1,600.5	\$ 37.3	\$ 1,637.8		
Other comprehensive earnings		918.1		10.2		928.3	(16.9)	911.4		
Balance at December 31, 2013		2,522.2		6.6		2,528.8	20.4	2,549.2		
Other comprehensive loss		(810.1)		(72.1)		(882.2)	(0.5)	(882.7)		
Balance at December 31, 2014		1,712.1		(65.5)		1,646.6	19.9	1,666.5		
Other comprehensive loss		(732.9)		(17.8)		(750.7)	0.5	(750.2)		
Balance at December 31, 2015	\$	979.2	\$	(83.3)	\$	895.9	\$ 20.4	\$ 916.3		

<sup>(</sup>b) The 2015 amount excludes aggregate curtailment gains of \$7.9 million, which are included in impairment, restructuring and other operating items, net, in our consolidated statement of operations.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

The components of other comprehensive earnings, net of taxes, are reflected in our consolidated statements of comprehensive earnings (loss). The following table summarizes the tax effects related to each component of other comprehensive earnings (loss), net of amounts reclassified to our consolidated statements of operations:

	Pre-tax amount										Tax benefit		 et-of-tax amount
			in	millions									
Year ended December 31, 2015:													
Foreign currency translation adjustments	\$	(737.1)	\$	4.2	\$ (732.9)								
Pension-related adjustments and other		(23.4)		6.1	(17.3)								
Other comprehensive loss		(760.5)		10.3	 (750.2)								
Other comprehensive earnings attributable to noncontrolling interests (a)		(0.7)		0.2	(0.5)								
Other comprehensive loss attributable to Liberty Global shareholders	\$	(761.2)	\$	10.5	\$ (750.7)								
Year ended December 31, 2014:													
Foreign currency translation adjustments	\$	(816.4)	\$	6.3	\$ (810.1)								
Pension-related adjustments		(89.9)		17.3	(72.6)								
Other comprehensive loss		(906.3)		23.6	(882.7)								
Other comprehensive loss attributable to noncontrolling interests (a)		0.8		(0.3)	0.5								
Other comprehensive loss attributable to Liberty Global shareholders	\$	(905.5)	\$	23.3	\$ (882.2)								
Year ended December 31, 2013:													
Foreign currency translation adjustments	\$	896.4	\$	4.4	\$ 900.8								
Pension-related adjustments		12.1		(1.5)	10.6								
Other comprehensive earnings		908.5		2.9	911.4								
Other comprehensive loss attributable to noncontrolling interests (b)		17.3		(0.4)	16.9								
Other comprehensive earnings attributable to Liberty Global shareholders	\$	925.8	\$	2.5	\$ 928.3								

<sup>(</sup>a) Amounts represent the noncontrolling interest owners' share of our pension-related adjustments.

<sup>(</sup>b) Amounts represent the noncontrolling interest owners' share of our foreign currency translation adjustments and pension-related adjustments.

## Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

## (17) <u>Commitments and Contingencies</u>

#### **Commitments**

In the normal course of business, we have entered into agreements that commit our company to make cash payments in future periods with respect to programming contracts, network and connectivity commitments, non-cancellable operating leases, purchases of customer premises and other equipment and other items. The following table sets forth the U.S. dollar equivalents of such commitments as of December 31, 2015:

					F	Payments of	lue d	luring:						
		2016		2017		2018		2019		2020	T	hereafter		Total
							in	millions						
Drogramming commitments	¢	1 004 5	¢	002.7	¢	(09.6	¢	272.2	¢	11.0	¢	7.6	¢	2 077 6
Programming commitments	Þ	1,004.5	Þ	883.7	Þ	698.6	\$	272.2	2	11.0	\$	7.6	Þ	2,877.6
Network and connectivity commitments		647.0		241.7		130.9		90.7		58.2		916.3		2,084.8
Purchase commitments		1,036.1		227.2		102.6		47.2		38.1		77.6		1,528.8
Operating leases		151.6		126.3		107.1		85.1		58.3		276.4		804.8
Other commitments		68.2		31.3		23.1		19.3		9.3		17.0		168.2
Total (a)	\$	2,907.4	\$	1,510.2	\$	1,062.3	\$	514.5	\$	174.9	\$	1,294.9	\$	7,464.2

<sup>(</sup>a) The commitments included in this table do not reflect any liabilities that are included in our December 31, 2015 consolidated balance sheet.

Programming commitments consist of obligations associated with certain of our programming, studio output and sports rights contracts that are enforceable and legally binding on us as we have agreed to pay minimum fees without regard to (i) the actual number of subscribers to the programming services, (ii) whether we terminate service to a portion of our subscribers or dispose of a portion of our distribution systems or (iii) whether we discontinue our premium sports services. In addition, programming commitments do not include increases in future periods associated with contractual inflation or other price adjustments that are not fixed. Accordingly, the amounts reflected in the above table with respect to these contracts are significantly less than the amounts we expect to pay in these periods under these contracts. Historically, payments to programming vendors have represented a significant portion of our operating costs, and we expect that this will continue to be the case in future periods. In this regard, our total third-party programming and copyright costs aggregated \$2,313.9 million (including \$2,066.6 million for the Liberty Global Group and \$247.3 million for the LiLAC Group), \$2,160.0 million (including \$1,928.0 million for the Liberty Global Group and \$232.0 million for the LiLAC Group) and \$1,631.0 million (including \$1,385.1 million for the Liberty Global Group and \$245.9 million for the LiLAC Group) during 2015, 2014 and 2013, respectively.

Network and connectivity commitments include (i) Telenet's commitments for certain operating costs associated with its leased network, (ii) commitments associated with our MVNO agreements, (iii) service commitments associated with our network extension projects, primarily in the U.K. and (iv) certain repair and maintenance, fiber capacity and energy commitments of Unitymedia. Effective October 1, 2015, Telenet's commitments for certain operating costs are subject to adjustment based on changes in the network operating costs incurred by Telenet with respect to its own networks. These potential adjustments are not subject to reasonable estimation and, therefore, are not included in the above table. The amounts reflected in the above table with respect to certain of our MVNO commitments represent fixed minimum amounts payable under these agreements and, therefore, may be significantly less than the actual amounts we ultimately pay in these periods.

Purchase commitments include unconditional and legally binding obligations related to (i) the purchase of customer premises and other equipment and (ii) certain service-related commitments, including call center, information technology and maintenance services.

Commitments arising from acquisition agreements are not reflected in the above table. For information regarding our commitments under acquisition agreements, see note 4.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

In addition to the commitments set forth in the table above, we have significant commitments under (i) derivative instruments and (ii) defined benefit plans and similar agreements, pursuant to which we expect to make payments in future periods. For information regarding our derivative instruments, including the net cash paid or received in connection with these instruments during 2015, 2014 and 2013, see note 7. For information regarding our defined benefit plans, see note 15.

We also have commitments pursuant to agreements with, and obligations imposed by, franchise authorities and municipalities, which may include obligations in certain markets to move aerial cable to underground ducts or to upgrade, rebuild or extend portions of our broadband communication systems. Such amounts are not included in the above table because they are not fixed or determinable.

Rental expense of our continuing operations under non-cancellable operating lease arrangements amounted to \$219.0 million (including \$204.7 million for the Liberty Global Group and \$14.3 million for the LiLAC Group), \$268.3 million (including \$252.0 million for the Liberty Global Group and \$16.3 million for the LiLAC Group) and \$238.6 million (including \$203.7 million for the Liberty Global Group and \$34.9 million for the LiLAC Group) during 2015, 2014 and 2013, respectively. It is expected that in the normal course of business, operating leases that expire generally will be renewed or replaced by similar leases.

We have established various defined contribution benefit plans for our and our subsidiaries' employees. The aggregate expense of our continuing operations for matching contributions under the various defined contribution employee benefit plans was \$76.7 million (including \$75.0 million for the Liberty Global Group and \$1.7 million for the LiLAC Group), \$63.2 million (including \$61.7 million for the Liberty Global Group and \$1.5 million for the LiLAC Group) and \$48.2 million (including \$47.6 million for the Liberty Global Group and \$0.6 million for the LiLAC Group) during 2015, 2014 and 2013, respectively.

### Guarantees and Other Credit Enhancements

In the ordinary course of business, we may provide (i) indemnifications to our lenders, our vendors and certain other parties and (ii) performance and/or financial guarantees to local municipalities, our customers and vendors. Historically, these arrangements have not resulted in our company making any material payments and we do not believe that they will result in material payments in the future.

## Legal and Regulatory Proceedings and Other Contingencies

Interkabel Acquisition. On November 26, 2007, Telenet and the PICs announced a non-binding agreement-in-principle to transfer the analog and digital television activities of the PICs, including all existing subscribers to Telenet. Subsequently, Telenet and the PICs entered into a binding agreement (the 2008 PICs Agreement), which closed effective October 1, 2008. Beginning in December 2007, Proximus NV/SA (Proximus), the incumbent telecommunications operator in Belgium, instituted several proceedings seeking to block implementation of these agreements. Proximus lodged summary proceedings with the President of the Court of First Instance of Antwerp to obtain a provisional injunction preventing the PICs from effecting the agreement-inprinciple and initiated a civil procedure on the merits claiming the annulment of the agreement-in-principle. In March 2008, the President of the Court of First Instance of Antwerp ruled in favor of Proximus in the summary proceedings, which ruling was overturned by the Court of Appeal of Antwerp in June 2008. Proximus brought this appeal judgment before the Cour de Cassation (the Belgian Supreme Court), which confirmed the appeal judgment in September 2010. On April 6, 2009, the Court of First Instance of Antwerp ruled in favor of the PICs and Telenet in the civil procedure on the merits, dismissing Proximus's request for the rescission of the agreement-in-principle and the 2008 PICs Agreement. On June 12, 2009, Proximus appealed this judgment with the Court of Appeal of Antwerp. In this appeal, Proximus is now also seeking compensation for damages should the 2008 PICs Agreement not be rescinded. While these proceedings were suspended indefinitely, other proceedings were initiated, which resulted in a ruling by the Belgian Council of State in May 2014 annulling (i) the decision of the PICs not to organize a public market consultation and (ii) the decision from the PICs' board of directors to approve the 2008 PICs Agreement. In December 2015, Proximus resumed the civil proceedings pending with the Court of Appeal of Antwerp seeking to have the 2008 PICs Agreement annulled and claiming damages of €1.4 billion (\$1.5 billion).

Telenet is in the process of evaluating the resumed proceedings and claim for damages and intends to defend itself vigorously. No assurance can be given as to the outcome of these or other proceedings. However, an unfavorable outcome of existing or future proceedings could potentially lead to the annulment of the 2008 PICs Agreement and/or to an obligation of Telenet to pay compensation for damages, subject to the relevant provisions of the 2008 PICs Agreement, which stipulate that Telenet is only responsible for damages in excess of €20.0 million (\$21.7 million). We do not expect the ultimate resolution of this matter to have

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

a material impact on our results of operations, cash flows or financial position. No amounts have been accrued by us with respect to this matter as the likelihood of loss is not considered to be probable.

Deutsche Telekom Litigation. On December 28, 2012, Unitymedia filed a lawsuit against Deutsche Telekom in which Unitymedia asserts that it pays excessive prices for the co-use of Deutsche Telekom's cable ducts in Unitymedia's footprint. The Federal Network Agency approved rates for the co-use of certain ducts of Deutsche Telekom in March 2011. Based in part on these approved rates, Unitymedia is seeking a reduction of the annual lease fees (approximately €76 million (\$83 million) for 2012) by approximately two-thirds and the return of similarly calculated overpayments from 2009 through the ultimate settlement date, plus accrued interest. While we expect a decision by the court of first instance during 2016, the resolution of this matter may take several years and no assurance can be given that Unitymedia's claims will be successful. Any recovery by Unitymedia will not be reflected in our consolidated financial statements until such time as the final disposition of this matter has been reached.

Vivendi Litigation. A wholly-owned subsidiary of our company is a plaintiff in certain litigation titled Liberty Media Corporation, et. al. v. Vivendi S.A. and Universal Studios. A predecessor of Liberty Global was a subsidiary of Liberty Media Corporation (Liberty Media) through June 6, 2004. In connection with Liberty Media's prosecution of the action, our subsidiary assigned its rights to Liberty Media in exchange for a contingent payout in the event Liberty Media recovered any amounts as a result of the action. Our subsidiary's interest in any such recovery will be equal to 10% of the recovery amount, including any interest awarded, less the amount to be retained by Liberty Media for (i) all fees and expenses incurred by Liberty Media in connection with the action (including expenses to be incurred in connection with any appeals and the payment of certain deferred legal fees) and (ii) agreed upon interest on such fees and expenses. On January 17, 2013, following a jury trial, the court entered a final judgment in favor of the plaintiffs in the amount of €944 million (\$1,026 million), including prejudgment interest. Vivendi S.A. and Universal Studios have filed a notice of appeal of the court's final judgment to the Second Circuit Court of Appeals. As a result, the amount that our subsidiary may ultimately recover in connection with the final resolution of the action, if any, is uncertain. Any recovery by our company will not be reflected in our consolidated financial statements until such time as the final disposition of this matter has been reached.

Liberty Puerto Rico Matter. In November 2012, we completed a business combination that resulted in, among other matters, the combination of our then operating subsidiary in Puerto Rico with San Juan Cable, LLC dba OneLink Communications (OneLink). In connection with this transaction (the OneLink Acquisition), Liberty Puerto Rico, as the surviving entity, became a party to certain claims previously asserted by the incumbent telephone operator against OneLink based on alleged conduct of OneLink that occurred prior to the OneLink Acquisition (the PRTC Claim). The PRTC Claim includes an allegation that OneLink acted in an anticompetitive manner in connection with a series of legal and regulatory proceedings it initiated against the incumbent telephone operator in Puerto Rico beginning in 2009. In March 2014, a separate class action claim was filed in Puerto Rico (the Class Action Claim) containing allegations substantially similar to those asserted in the PRTC Claim, but alleging ongoing injury on behalf of a consumer class (as opposed to harm to a competitor). The former owners of OneLink have partially indemnified us through November 27, 2016 for any losses we may incur in connection with the PRTC Claim up to a specified maximum amount. However, the indemnity does not cover any potential losses resulting from the Class Action Claim. Liberty Puerto Rico has recorded a provision and a related indemnification asset representing its best estimate of the net loss that it may incur upon the ultimate resolution of the PRTC Claim. While Liberty Puerto Rico expects that the net amount required to satisfy these contingencies will not materially differ from the estimated amount it has accrued, no assurance can be given that the ultimate resolution of these matters will not have an adverse impact on our results of operations, cash flows or financial position in any given period.

Belgium Regulatory Developments. In December 2010, the Belgisch Instituut voor Post en Telecommunicatie and the regional regulators for the media sectors (together, the **Belgium Regulatory Authorities**) published their respective draft decisions reflecting the results of their joint analysis of the broadcasting market in Belgium.

The Belgium Regulatory Authorities adopted a final decision on July 1, 2011 (the July 2011 Decision) with some minor revisions. The regulatory obligations imposed by the July 2011 Decision include (i) an obligation to make a resale offer at "retail minus" of the cable analog package available to third party operators (including Proximus), (ii) an obligation to grant third-party operators (except Proximus) access to digital television platforms (including the basic digital video package) at "retail minus," and (iii) an obligation to make a resale offer at "retail minus" of broadband internet access available to beneficiaries of the digital television access obligation that wish to offer bundles of digital video and broadband internet services to their customers (except Proximus).

## Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

In February 2012, Telenet submitted draft reference offers regarding the obligations described above, and the Belgium Regulatory Authorities published the final decision on September 9, 2013. Telenet has implemented the access obligations as described in its reference offers and, as of June 23, 2014, access to the Telenet network had become operational and can be applied by wireless operator Mobistar SA (**Mobistar**). In addition, as a result of the November 2014 decision by the Brussels Court of Appeal described below, on November 14, 2014, Proximus submitted a request to Telenet to commence access negotiations. Telenet contests this request and has asked the Belgium Regulatory Authorities to assess the reasonableness of the Proximus request. The timing for a decision regarding this assessment by the Belgium Regulatory Authorities is not known.

On December 14, 2015, the Belgium Regulatory Authorities published a draft decision, which amended previously-issued decisions, that sets forth the "retail-minus" tariffs of minus 26% for basic television (basic analog and digital video package) and minus 18% for the bundle of basic television and broadband internet services during an initial two-year period. Following this two-year period, the tariffs would change to minus 15% and 7%, respectively. The draft decision was notified to the European Commission and a final decision is expected in the first quarter of 2016. A "retail-minus" method of pricing involves a wholesale tariff calculated as the retail price for the offered service by Telenet, excluding VAT and copyrights, and further deducting the retail costs avoided by offering the wholesale service (such as costs for billing, franchise, consumer service, marketing and sales).

Telenet filed an appeal against the July 2011 Decision with the Brussels Court of Appeal. On November 12, 2014, the Brussels Court of Appeal rejected Telenet's appeal of the July 2011 Decision and accepted Proximus's claim that Proximus should be allowed access to Telenet's, among other operators, digital television platform and the resale of bundles of digital video and broadband internet services. On November 30, 2015, Telenet filed an appeal of this decision with the Belgian Supreme Court. In 2015, Telenet and wireless operator Mobistar each filed an appeal with the Brussels Court of Appeal against the decision regarding the quantitative aspects of the reference offers. A decision with respect to these appeals is expected during 2016. There can be no certainty that Telenet's appeals will be successful.

The July 2011 Decision aims to, and in its application may, strengthen Telenet's competitors by granting them resale access to Telenet's network to offer competing products and services notwithstanding Telenet's substantial historical financial outlays in developing the infrastructure. In addition, any resale access granted to competitors could (i) limit the bandwidth available to Telenet to provide new or expanded products and services to the customers served by its network and (ii) adversely impact Telenet's ability to maintain or increase its revenue and cash flows. The extent of any such adverse impacts ultimately will be dependent on the extent that competitors take advantage of the resale access ultimately afforded to Telenet's network and other competitive factors or market developments.

Financial Transactions Tax. Eleven countries in the EU, including Belgium, Germany, Austria and Slovakia, are participating in an enhanced cooperation procedure to introduce a financial transactions tax (the FTT). Under the draft language of the FTT proposal, a wide range of financial transactions could be taxed at rates of at least 0.01% for derivative transactions based on the notional amount and 0.1% for other covered financial transactions based on the underlying transaction price. Each of the individual countries would be permitted to determine an exact rate, which could be higher than the proposed rates of 0.01% and 0.1%. Any implementation of the FTT could have a global impact because it would apply to all financial transactions where a financial institution is involved (including unregulated entities that engage in certain types of covered activity) and either of the parties (whether the financial institution or its counterparty) is in one of the eleven participating countries. Although ongoing debate in the relevant countries demonstrates continued momentum around the FTT, uncertainty remains as to when the FTT would be implemented and the breadth of its application. Based on our understanding of the current status of the potential FTT, we do not expect that any implementation of the FTT would occur before January 2017. Any imposition of the FTT could increase banking fees and introduce taxes on internal transactions that we currently perform. Due to the uncertainty regarding the FTT, we are currently unable to estimate the financial impact that the FTT could have on our results of operations, cash flows or financial position.

Virgin Media VAT Matters. Virgin Media's application of VAT with respect to certain revenue generating activities has been challenged by the U.K. tax authorities. Virgin Media has estimated its maximum exposure in the event of an unfavorable outcome to be £45.2 million (\$66.6 million) as of December 31, 2015. No portion of this exposure has been accrued by Virgin Media as the likelihood of loss is not considered to be probable. A court hearing was held at the end of September 2014 in relation to the U.K. tax authorities' challenge and the court's decision is expected prior to March 31, 2016.

On March 19, 2014, the U.K. government announced a change in legislation with respect to the charging of VAT in connection with prompt payment discounts such as those that we offer to our fixed-line telephony customers. This change, which took effect

## Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

on May 1, 2014, impacted our company and some of our competitors. As a result of this legislation, our revenue was \$24.0 million lower during 2015 as compared to 2014. The U.K. tax authority issued a decision in the fourth quarter of 2015 challenging our application of the prompt payment discount rules prior to the May 1, 2014 change in legislation. We have appealed this decision. As part of the appeal process, we were required to make aggregate payments of £67.0 million (\$99.1 million at the respective transaction dates), which included the challenged amount of £63.7 million and related interest of £3.3 million. The aggregate amount paid does not include penalties, which could be significant in the unlikely event that penalties were to be assessed. This matter will likely be subject to court proceedings that could delay the ultimate resolution for an extended period of time. No portion of this potential exposure has been accrued by our company as the likelihood of loss is not considered to be probable.

Hungary VAT Matter. In September 2015, our DTH operations in Luxembourg received a first instance decision from the Hungarian tax authorities as a result of an audit with respect to VAT payments that the Hungarian tax authorities conducted for the years 2010 through 2012. The Hungarian tax authorities have assessed our DTH operations with an obligation to pay VAT for the years audited of HUF 5,902.2 million (\$20.3 million), excluding interest and penalties, which could be significant. We believe that our DTH operations have operated in compliance with all applicable rules, regulations and interpretations thereof, including a binding tax ruling that we received from the Hungarian government in 2010. Although we are appealing the first instance decision, we may be required to pay all or a portion of the assessed amount during the pendency of the appeal. No portion of this exposure has been accrued by us as the likelihood of loss is not considered to be probable.

Telenet MVNO Matter. Telenet and Mobistar are currently in dispute over amounts payable to Mobistar with respect to certain provisions of Telenet's MVNO agreement with Mobistar (the **Mobistar MVNO Agreement**). As part of this dispute, Mobistar initiated legal proceedings against Telenet claiming, among other things, that the migration period after termination or expiration of the Mobistar MVNO Agreement should be shortened from 24 months to six months. Telenet believes it has strong arguments against Mobistar's claims and intends to defend itself vigorously. We cannot currently predict the outcome of these proceedings; however, in the unlikely event that the migration period is shortened, Telenet's mobile business could be adversely impacted. The oral hearing in this matter is currently scheduled for September 23, 2016.

Other Regulatory Issues. Video distribution, broadband internet, fixed-line telephony, mobile and content businesses are regulated in each of the countries in which we operate. The scope of regulation varies from country to country, although in some significant respects regulation in European markets is harmonized under the regulatory structure of the EU. Adverse regulatory developments could subject our businesses to a number of risks. Regulation, including conditions imposed on us by competition or other authorities as a requirement to close acquisitions or dispositions, could limit growth, revenue and the number and types of services offered and could lead to increased operating costs and property and equipment additions. In addition, regulation may restrict our operations and subject them to further competitive pressure, including pricing restrictions, interconnect and other access obligations, and restrictions or controls on content, including content provided by third parties. Failure to comply with current or future regulation could expose our businesses to various penalties. In this regard, beginning in September 2014, various decreases to tariff rates have been proposed and implemented by Chilean regulatory authorities, and a further decrease to one tariff rate is pending. None of these decreases had, or are expected to have, a material impact on VTR's revenue or expenses.

We have security accreditations across a range of B2B products and services in order to increase our offerings to public sector organizations in the U.K. These accreditations are granted subject to periodic reviews of our policies and procedures by U.K. governmental authorities. If we were to fail to maintain these accreditations or obtain new accreditations when required, it could impact our ability to provide certain offerings to the public sector.

In addition to the foregoing items, we have contingent liabilities related to matters arising in the ordinary course of business including (i) legal proceedings, (ii) issues involving VAT and wage, property and other tax issues and (iii) disputes over interconnection, programming, copyright and channel carriage fees. While we generally expect that the amounts required to satisfy these contingencies will not materially differ from any estimated amounts we have accrued, no assurance can be given that the resolution of one or more of these contingencies will not result in a material impact on our results of operations, cash flows or financial position in any given period. Due, in general, to the complexity of the issues involved and, in certain cases, the lack of a clear basis for predicting outcomes, we cannot provide a meaningful range of potential losses or cash outflows that might result from any unfavorable outcomes.

## Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

### (18) Segment Reporting

We generally identify our reportable segments as those consolidated subsidiaries that represent 10% or more of our revenue, Adjusted OIBDA (as defined below) or total assets. In certain cases, we may elect to include an operating segment in our segment disclosure that does not meet the above-described criteria for a reportable segment. We evaluate performance and make decisions about allocating resources to our operating segments based on financial measures such as revenue and Adjusted OIBDA. In addition, we review non-financial measures such as subscriber growth, as appropriate.

Adjusted operating income before depreciation and amortization (Adjusted OIBDA) is the primary measure used by our chief operating decision maker to evaluate segment operating performance. Adjusted OIBDA is also a key factor that is used by our internal decision makers to (i) determine how to allocate resources to segments and (ii) evaluate the effectiveness of our management for purposes of annual and other incentive compensation plans. As we use the term, Adjusted OIBDA is defined as operating income before depreciation and amortization, share-based compensation, provisions and provision releases related to significant litigation and impairment, restructuring and other operating items. Other operating items include (a) gains and losses on the disposition of long-lived assets, (b) third-party costs directly associated with successful and unsuccessful acquisitions and dispositions, including legal, advisory and due diligence fees, as applicable, and (c) other acquisition-related items, such as gains and losses on the settlement of contingent consideration. Our internal decision makers believe Adjusted OIBDA is a meaningful measure and is superior to available GAAP measures because it represents a transparent view of our recurring operating performance that is unaffected by our capital structure and allows management to (1) readily view operating trends, (2) perform analytical comparisons and benchmarking between segments and (3) identify strategies to improve operating performance in the different countries in which we operate. We believe our Adjusted OIBDA measure is useful to investors because it is one of the bases for comparing our performance with the performance of other companies in the same or similar industries, although our measure may not be directly comparable to similar measures used by other public companies. Adjusted OIBDA should be viewed as a measure of operating performance that is a supplement to, and not a substitute for, operating income, net earnings or loss, cash flow from operating activities and other GAAP measures of income or cash flows. A reconciliation of total segment Adjusted OIBDA to our loss from continuing operations before income taxes is presented below.

We began presenting our operating segment in Puerto Rico as a separate reportable segment during the second quarter of 2015 in anticipation of the issuance of the LiLAC Shares. Previously, this operating segment was included in our corporate and other category. Segment information for all periods presented reflects the above-described change. We present only the reportable segments of our continuing operations in the tables below.

As of December 31, 2015, our reportable segments are as follows:

- European Operations Division:
  - U.K./Ireland
  - The Netherlands
  - Germany
  - Belgium
  - Switzerland/Austria
  - Central and Eastern Europe
- LiLAC Division:
  - Chile
  - Puerto Rico

All of the reportable segments set forth above derive their revenue primarily from broadband communications services, including video, broadband internet and fixed-line telephony services. Most of our reportable segments also provide B2B and mobile services. At December 31, 2015, our operating segments in the European Operations Division provided broadband communications services in 12 European countries and DTH services to customers in the Czech Republic, Hungary, Romania and Slovakia through a Luxembourg-based organization that we refer to as "UPC DTH." In addition to UPC DTH, our Central and Eastern Europe segment includes our broadband communications operations in the Czech Republic, Hungary, Poland, Romania and Slovakia. The European Operations Division's central and other category includes (i) costs associated with certain centralized functions, including billing systems, network operations, technology, marketing, facilities, finance and other administrative functions, and (ii) intersegment eliminations within the European Operations Division. The corporate and other category for the

## Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

Liberty Global Group includes less significant consolidated operating segments that provide programming and other services. Intersegment eliminations primarily represent the elimination of intercompany transactions between our broadband communications and programming operations. Inter-group eliminations primarily represent the elimination of intercompany transactions between the Liberty Global Group and the LiLAC Group.

## Performance Measures of Our Reportable Segments

The amounts presented below represent 100% of each of our reportable segment's revenue and Adjusted OIBDA. As we have the ability to control Telenet and Liberty Puerto Rico, we consolidate 100% of the revenue and expenses of these entities in our consolidated statements of operations despite the fact that third parties own significant interests in these entities. The noncontrolling owners' interests in the operating results of Telenet, Liberty Puerto Rico and other less significant majority-owned subsidiaries are reflected in net earnings or loss attributable to noncontrolling interests in our consolidated statements of operations.

	Year ended December 31,								
	20	15	14	20	13				
	Revenue	Adjusted OIBDA	Revenue	Adjusted OIBDA	Revenue	Adjusted OIBDA			
			in mi	llions					
Liberty Global Group:									
European Operations Division:									
U.K./Ireland (a)	\$ 7,058.7	\$ 3,162.1	\$ 7,409.9	\$ 3,235.7	\$ 4,117.4	\$ 1,742.8			
The Netherlands (b)	2,745.3	1,519.5	1,498.5	857.9	1,242.4	721.7			
Germany	2,399.5	1,502.1	2,711.5	1,678.2	2,559.2	1,541.1			
Belgium	2,021.0	990.3	2,279.4	1,125.0	2,185.9	1,049.4			
Switzerland/Austria	1,758.2	1,040.1	1,846.1	1,056.4	1,767.1	1,005.7			
Total Western Europe	15,982.7	8,214.1	15,745.4	7,953.2	11,872.0	6,060.7			
Central and Eastern Europe	1,066.6	474.0	1,259.5	583.0	1,272.0	584.5			
Central and other	(5.4)	(289.2)	(7.1)	(282.7)	(0.4)	(239.1)			
Total European Operations Division	17,043.9	8,398.9	16,997.8	8,253.5	13,143.6	6,406.1			
Corporate and other	42.3	(222.6)	70.8	(212.0)	77.1	(169.2)			
Intersegment eliminations (c)	(23.5)	_	(24.9)	4.0	(34.0)	44.8			
Total Liberty Global Group	17,062.7	8,176.3	17,043.7	8,045.5	13,186.7	6,281.7			
LiLAC Group:									
LiLAC Division:									
Chile	838.1	328.1	898.5	351.0	991.6	353.6			
Puerto Rico (d)	379.2	167.2	306.1	128.9	297.2	107.3			
Total LiLAC Division	1,217.3	495.3	1,204.6	479.9	1,288.8	460.9			
Corporate and other	_	(4.3)	_	(3.1)	_	(1.9)			
Total LiLAC Group	1,217.3	491.0	1,204.6	476.8	1,288.8	459.0			
Inter-group eliminations					(1.3)				
Total	\$18,280.0	\$ 8,667.3	\$18,248.3	\$ 8,522.3	\$14,474.2	\$ 6,740.7			

<sup>(</sup>a) The amounts presented for 2013 include the post-acquisition revenue and Adjusted OIBDA of Virgin Media from June 8, 2013 through December 31, 2013.

<sup>(</sup>b) The amounts presented for 2014 include the post-acquisition revenue and Adjusted OIBDA of Ziggo from November 12, 2014 through December 31, 2014.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

- (c) The intersegment eliminations that are applicable to revenue are primarily related to transactions between our European Operations Division and our continuing programming operations. The intersegment eliminations that are applicable to Adjusted OIBDA are related to transactions between our European Operations Division and the Chellomedia Disposal Group, which eliminations are no longer recorded following the completion of the Chellomedia Transaction on January 31, 2014.
- (d) The amounts presented for 2015 include the post-acquisition revenue and Adjusted OIBDA of Choice, which was acquired on June 3, 2015.

The following table provides a reconciliation of total segment Adjusted OIBDA from continuing operations to loss from continuing operations before income taxes:

	Year	end	led Decembe	er 3	1,
	2015		2014		2013
		ir	n millions		
Total segment Adjusted OIBDA from continuing operations	\$ 8,667.3	\$	8,522.3	\$	6,740.7
Share-based compensation expense	(318.2)		(257.2)		(300.7)
Depreciation and amortization	(5,825.8)		(5,500.1)		(4,276.4)
Release of litigation provision	_		_		146.0
Impairment, restructuring and other operating items, net	(174.1)		(536.8)		(297.5)
Operating income	2,349.2		2,228.2		2,012.1
Interest expense	(2,441.4)		(2,544.7)		(2,286.9)
Interest and dividend income	35.9		31.7		113.1
Realized and unrealized gains (losses) on derivative instruments, net	847.2		88.8		(1,020.4)
Foreign currency transaction gains (losses), net	(1,149.2)		(836.5)		349.3
Realized and unrealized gains due to changes in fair values of certain investments, net	124.5		205.2		524.1
Losses on debt modification and extinguishment, net	(388.0)		(186.2)		(212.2)
Other expense, net	(62.8)		(42.4)		(5.6)
Loss from continuing operations before income taxes	\$ (684.6)	\$	(1,055.9)	\$	(526.5)

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

# Balance Sheet Data of our Reportable Segments

Selected balance sheet data of our reportable segments is set forth below:

Total Descriptions (Propertions Division:           Total Propertions Division:           Total Propertions Division:           UK/Ireland         19,789.9         21,754.2         23,647.0         25,487.2           The Netherlands         14,741.7         17,092.7         15,132.1         17,387.0           Germany         7,898.9         9,117.9         8,634.1         9,512.8           Belgium         3,674.9         4,449.6         4,828.8           Switzerland/Austria         5,108.0         5,309.0         5,436.0         5,634.9           Total Western Europe         2,268.0         2,459.9         2,357.5         2,566.4           Central and Eastern Europe         2,268.0         2,459.9         2,357.5         2,566.4           Central and other         543.9         4,949.4         1,574.3         2,613.2           Total European Operations Division         540.25.3         60,374.5         1,574.3         2,613.2           Corporate and other         519.6         68.9         3,332.5         2,045.2           Total European Operations Division         87.7         1,017.3         1,506.6         1,508.2           Total Liberty Global Group         8873.7 <t< th=""><th></th><th>Long-liv</th><th>red assets</th><th>Total</th><th>assets</th></t<>		Long-liv	red assets	Total	assets
In million           Liberty Global Group:           European Operations Division:           U.K./Ireland         \$19,789.9         \$21,754.2         \$23,647.6         \$25,487.2           The Netherlands         14,741.7         17,092.7         15,132.1         17,387.0           Germany         7,898.9         9,117.9         8,634.1         9,512.8           Belgium         3,674.9         4,149.5         4,493.6         4,828.8           Switzerland/Austria         5,108.0         5,300.9         5,438.6         5,643.9           Total Western Europe         51,213.4         57,152.2         57,346.0         62,859.7           Central and Eastern Europe         2,268.0         2,459.9         2,357.5         2,566.4           Central and other         54,025.3         60,374.5         61,277.8         68,039.3           Corporate and other         119.6         68.9         3,332.5         2,045.2           Total Liberty Global Group         54,144.9         60,433.4         64,610.3         70,084.5           LiLAC Group:         2         2,445.6         3,106.0         2,726.9           Puerto Rico         87.3         1,017.3         1,506.6         1,5		Decem	ber 31,	Decem	ber 31,
Liberty Global Group:           European Operations Division:           U.K./Ireland         \$ 19,789.9         \$ 21,754.2         \$ 23,647.6         \$ 25,487.2           The Netherlands         14,741.7         17,092.7         15,132.1         17,387.0           Germany         7,898.9         9,117.9         8,634.1         9,512.8           Belgium         3,674.9         4,149.5         4,493.6         4,828.8           Switzerland/Austria         5,108.0         5,300.9         5,438.6         5,643.9           Total Western Europe         51,213.4         57,415.2         57,346.0         62,859.7           Central and Eastern Europe         2,268.0         2,459.9         2,357.5         2,566.4           Central and other         543.9         499.4         1,574.3         2,613.2           Total European Operations Division         54,025.3         60,374.5         61,277.8         68,039.3           Corporate and other         119.6         68.9         3,332.5         2,045.2           Total Liberty Global Group         54,144.9         60,443.4         64,610.3         70,084.5           LiLAC Division:         54,144.9         60,443.4         64,610.3         70,084.5		2015			2014
European Operations Division:           U.K./Ireland         \$ 19,789.9         \$ 21,754.2         \$ 23,647.6         \$ 25,487.2           The Netherlands         14,741.7         17,092.7         15,132.1         17,387.0           Germany         7,898.9         9,117.9         8,634.1         9,512.8           Belgium         3,674.9         4,149.5         4,493.6         4,828.8           Switzerland/Austria         5,108.0         5,300.9         5,438.6         5,643.9           Total Western Europe         51,213.4         57,415.2         57,346.0         62,859.7           Central and Eastern Europe         2,268.0         2,459.9         2,357.5         2,566.4           Central and other         543.9         499.4         1,574.3         2,613.2           Total European Operations Division         54,025.3         60,374.5         61,277.8         68,039.3           Corporate and other         119.6         68.9         3,332.5         2,045.2           Total Liberty Global Group         54,144.9         60,443.4         64,610.3         70,084.5           LiLAC Group:         873.7         1,017.3         1,506.6         1,513.2           Puerto Rico         1,468.8         1,128.3			in mi	illions	
U.K./Ireland       \$ 19,789,9       \$ 21,754,2       \$ 23,647,6       \$ 25,487,2         The Netherlands       14,741,7       17,092,7       15,132,1       17,387,0         Germany       7,898,9       9,117,9       8,634,1       9,512,8         Belgium       3,674,9       4,149,5       4,493,6       4,828,8         Switzerland/Austria       5,108.0       5,300,9       5,438,6       5,643,9         Total Western Europe       2,268.0       2,459,9       2,357,5       2,566,4         Central and Eastern Europe       2,268.0       2,459,9       2,357,5       2,566,4         Central and other       543,9       499,4       1,574,3       2,613,2         Total European Operations Division       54,025,3       60,374,5       61,277,8       68,039,3         Corporate and other       119,6       68,9       3,332,5       2,045,2         Total Liberty Global Group       54,144,9       60,443,4       64,610,3       70,084,5         LiLAC Division:       873,7       1,017,3       1,506,6       1,513,2         Puerto Rico       1,468,8       1,128,3       1,599,4       1,213,7         Total LiLAC Division       2,342,5       2,145,6       3,106,0       2,726,9     <	Liberty Global Group:				
The Netherlands         14,741.7         17,092.7         15,132.1         17,387.0           Germany         7,898.9         9,117.9         8,634.1         9,512.8           Belgium         3,674.9         4,149.5         4,493.6         4,828.8           Switzerland/Austria         5,108.0         5,300.9         5,438.6         5,643.9           Total Western Europe         51,213.4         57,415.2         57,346.0         62,859.7           Central and Eastern Europe         2,268.0         2,459.9         2,357.5         2,566.4           Central and other         543.9         499.4         1,574.3         2,613.2           Total European Operations Division         54,025.3         60,374.5         61,277.8         68,039.3           Corporate and other         119.6         68.9         3,332.5         2,045.2           Total Liberty Global Group         54,144.9         60,443.4         64,610.3         70,084.5           LiLAC Division:         873.7         1,017.3         1,506.6         1,513.2           Puerto Rico         1,468.8         1,128.3         1,599.4         1,213.7           Total LiLAC Division         2,342.5         2,145.6         3,106.0         2,726.9           C	European Operations Division:				
Germany         7,898.9         9,117.9         8,634.1         9,512.8           Belgium         3,674.9         4,149.5         4,493.6         4,828.8           Switzerland/Austria         5,108.0         5,300.9         5,438.6         5,643.9           Total Western Europe         51,213.4         57,415.2         57,346.0         62,859.7           Central and Eastern Europe         2,268.0         2,459.9         2,357.5         2,566.4           Central and other         543.9         499.4         1,574.3         2,613.2           Total European Operations Division         54,025.3         60,374.5         61,277.8         68,039.3           Corporate and other         119.6         68.9         3,332.5         2,045.2           Total Liberty Global Group         54,144.9         60,443.4         64,610.3         70,084.5           LiLAC Group:         2         2         2         2         2         4         1,506.6         1,513.2           Puerto Rico         1,468.8         1,128.3         1,599.4         1,213.7         1,213.7         1,213.7         1,213.7         2         2,342.5         2,145.6         3,106.0         2,726.9           Corporate and other         2,342.5	U.K./Ireland	\$ 19,789.9	\$ 21,754.2	\$ 23,647.6	\$ 25,487.2
Belgium.         3,674.9         4,149.5         4,493.6         4,828.8           Switzerland/Austria         5,108.0         5,300.9         5,438.6         5,643.9           Total Western Europe.         51,213.4         57,415.2         57,346.0         62,859.7           Central and Eastern Europe         2,268.0         2,459.9         2,357.5         2,566.4           Central and other.         543.9         499.4         1,574.3         2,613.2           Total European Operations Division.         54,025.3         60,374.5         61,277.8         68,039.3           Corporate and other         119.6         68.9         3,332.5         2,045.2           Total Liberty Global Group         54,144.9         60,443.4         64,610.3         70,084.5           LiLAC Group:         1         1,468.8         1,128.3         1,599.4         1,213.7           Total LiLAC Division         2,342.5         2,145.6         3,106.0         2,726.9           Corporate and other         -         -         161.5         44.1           Total LiLAC Group         2,342.5         2,145.6         3,267.5         2,771.0           Inter-group eliminations         -         -         (10.6)         (13.6)	The Netherlands	14,741.7	17,092.7	15,132.1	17,387.0
Switzerland/Austria         5,108.0         5,300.9         5,438.6         5,643.9           Total Western Europe.         51,213.4         57,415.2         57,346.0         62,859.7           Central and Eastern Europe.         2,268.0         2,459.9         2,357.5         2,566.4           Central and other.         543.9         499.4         1,574.3         2,613.2           Total European Operations Division.         54,025.3         60,374.5         61,277.8         68,039.3           Corporate and other         119.6         68.9         3,332.5         2,045.2           Total Liberty Global Group         54,144.9         60,443.4         64,610.3         70,084.5           LiLAC Group:         873.7         1,017.3         1,506.6         1,513.2           Puerto Rico         1,468.8         1,128.3         1,599.4         1,213.7           Total LiLAC Division         2,342.5         2,145.6         3,106.0         2,726.9           Corporate and other         —         —         161.5         44.1           Total LiLAC Group         2,342.5         2,145.6         3,267.5         2,771.0           Inter-group eliminations         —         —         —         (10.6)         (13.6) <td>Germany</td> <td>7,898.9</td> <td>9,117.9</td> <td>8,634.1</td> <td>9,512.8</td>	Germany	7,898.9	9,117.9	8,634.1	9,512.8
Total Western Europe.         51,213.4         57,415.2         57,346.0         62,859.7           Central and Eastern Europe         2,268.0         2,459.9         2,357.5         2,566.4           Central and other.         543.9         499.4         1,574.3         2,613.2           Total European Operations Division.         54,025.3         60,374.5         61,277.8         68,039.3           Corporate and other.         119.6         68.9         3,332.5         2,045.2           Total Liberty Global Group         54,144.9         60,443.4         64,610.3         70,084.5           LiLAC Group:         LiLAC Division:         873.7         1,017.3         1,506.6         1,513.2           Puerto Rico         1,468.8         1,128.3         1,599.4         1,213.7           Total LiLAC Division         2,342.5         2,145.6         3,106.0         2,726.9           Corporate and other         —         —         —         161.5         44.1           Total LiLAC Group         2,342.5         2,145.6         3,267.5         2,771.0           Inter-group eliminations         —         —         —         (10.6)         (13.6)	Belgium	3,674.9	4,149.5	4,493.6	4,828.8
Central and Eastern Europe       2,268.0       2,459.9       2,357.5       2,566.4         Central and other       543.9       499.4       1,574.3       2,613.2         Total European Operations Division       54,025.3       60,374.5       61,277.8       68,039.3         Corporate and other       119.6       68.9       3,332.5       2,045.2         Total Liberty Global Group       54,144.9       60,443.4       64,610.3       70,084.5         LiLAC Group:       LiLAC Division:         Chile       873.7       1,017.3       1,506.6       1,513.2         Puerto Rico       1,468.8       1,128.3       1,599.4       1,213.7         Total LiLAC Division       2,342.5       2,145.6       3,106.0       2,726.9         Corporate and other       —       —       161.5       44.1         Total LiLAC Group       2,342.5       2,145.6       3,267.5       2,771.0         Inter-group eliminations       —       —       (10.6)       (13.6)	Switzerland/Austria	5,108.0	5,300.9	5,438.6	5,643.9
Central and other         543.9         499.4         1,574.3         2,613.2           Total European Operations Division         54,025.3         60,374.5         61,277.8         68,039.3           Corporate and other         119.6         68.9         3,332.5         2,045.2           Total Liberty Global Group         54,144.9         60,443.4         64,610.3         70,084.5           LiLAC Group:         LiLAC Division:           Chile         873.7         1,017.3         1,506.6         1,513.2           Puerto Rico         1,468.8         1,128.3         1,599.4         1,213.7           Total LiLAC Division         2,342.5         2,145.6         3,106.0         2,726.9           Corporate and other         -         -         161.5         44.1           Total LiLAC Group         2,342.5         2,145.6         3,267.5         2,771.0           Inter-group eliminations         -         -         (10.6)         (13.6)	Total Western Europe	51,213.4	57,415.2	57,346.0	62,859.7
Total European Operations Division         54,025.3         60,374.5         61,277.8         68,039.3           Corporate and other         119.6         68.9         3,332.5         2,045.2           Total Liberty Global Group         54,144.9         60,443.4         64,610.3         70,084.5           LiLAC Group:         LiLAC Division:           Chile         873.7         1,017.3         1,506.6         1,513.2           Puerto Rico         1,468.8         1,128.3         1,599.4         1,213.7           Total LiLAC Division         2,342.5         2,145.6         3,106.0         2,726.9           Corporate and other         —         —         161.5         44.1           Total LiLAC Group         2,342.5         2,145.6         3,267.5         2,771.0           Inter-group eliminations         —         —         —         (10.6)         (13.6)	Central and Eastern Europe	2,268.0	2,459.9	2,357.5	2,566.4
Corporate and other         119.6         68.9         3,332.5         2,045.2           Total Liberty Global Group         54,144.9         60,443.4         64,610.3         70,084.5           LiLAC Group:         LiLAC Division:           Chile         873.7         1,017.3         1,506.6         1,513.2           Puerto Rico         1,468.8         1,128.3         1,599.4         1,213.7           Total LiLAC Division         2,342.5         2,145.6         3,106.0         2,726.9           Corporate and other         —         —         161.5         44.1           Total LiLAC Group         2,342.5         2,145.6         3,267.5         2,771.0           Inter-group eliminations         —         —         —         (10.6)         (13.6)	Central and other	543.9	499.4	1,574.3	2,613.2
Total Liberty Global Group         54,144.9         60,443.4         64,610.3         70,084.5           LiLAC Group:         LiLAC Division:           Chile	Total European Operations Division	54,025.3	60,374.5	61,277.8	68,039.3
LiLAC Group:         LiLAC Division:       873.7       1,017.3       1,506.6       1,513.2         Puerto Rico       1,468.8       1,128.3       1,599.4       1,213.7         Total LiLAC Division       2,342.5       2,145.6       3,106.0       2,726.9         Corporate and other       —       —       161.5       44.1         Total LiLAC Group       2,342.5       2,145.6       3,267.5       2,771.0         Inter-group eliminations       —       —       —       (10.6)       (13.6)	Corporate and other	119.6	68.9	3,332.5	2,045.2
LiLAC Division:         Chile	Total Liberty Global Group	54,144.9	60,443.4	64,610.3	70,084.5
Chile	LiLAC Group:				
Puerto Rico         1,468.8         1,128.3         1,599.4         1,213.7           Total LiLAC Division         2,342.5         2,145.6         3,106.0         2,726.9           Corporate and other         —         —         —         161.5         44.1           Total LiLAC Group         2,342.5         2,145.6         3,267.5         2,771.0           Inter-group eliminations         —         —         —         (10.6)         (13.6)	LiLAC Division:				
Total LiLAC Division         2,342.5         2,145.6         3,106.0         2,726.9           Corporate and other         —         —         —         161.5         44.1           Total LiLAC Group         2,342.5         2,145.6         3,267.5         2,771.0           Inter-group eliminations         —         —         —         (10.6)         (13.6)	Chile	873.7	1,017.3	1,506.6	1,513.2
Corporate and other         —         —         —         161.5         44.1           Total LiLAC Group         2,342.5         2,145.6         3,267.5         2,771.0           Inter-group eliminations         —         —         —         (10.6)         (13.6)	Puerto Rico	1,468.8	1,128.3	1,599.4	1,213.7
Total LiLAC Group         2,342.5         2,145.6         3,267.5         2,771.0           Inter-group eliminations         —         —         —         (10.6)         (13.6)	Total LiLAC Division	2,342.5	2,145.6	3,106.0	2,726.9
Inter-group eliminations	Corporate and other	_	_	161.5	44.1
	Total LiLAC Group	2,342.5	2,145.6	3,267.5	2,771.0
Total	Inter-group eliminations	_	_	(10.6)	(13.6)
	Total	\$ 56,487.4	\$ 62,589.0	\$ 67,867.2	\$ 72,841.9

## Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

## Property and Equipment Additions of our Reportable Segments

The property and equipment additions of our reportable segments (including capital additions financed under vendor financing or capital lease arrangements) are presented below and reconciled to the capital expenditure amounts included in our consolidated statements of cash flows. For additional information concerning capital additions financed under vendor financing and capital lease arrangements, see note 9.

	Year	end	ed Decembe	er 31	ι,
	2015		2014		2013
		in	millions		
Liberty Global Group:					
European Operations Division:					
U.K./Ireland (a)	\$ 1,527.3	\$	1,506.7	\$	827.5
The Netherlands (b)	536.1		268.0		242.4
Germany	535.7		574.5		543.4
Belgium	371.6		448.9		453.7
Switzerland/Austria	315.6		327.2		306.4
Total Western Europe	3,286.3		3,125.3		2,373.4
Central and Eastern Europe	277.3		264.8		271.6
Central and other	280.7		257.9		256.0
Total European Operations Division	3,844.3		3,648.0		2,901.0
Corporate and other	65.9		5.0		6.3
Total Liberty Global Group	3,910.2		3,653.0		2,907.3
LiLAC Group:					
Chile	149.0		195.8		188.5
Puerto Rico (c)	78.1		60.4		65.8
Total LiLAC Group	227.1		256.2		254.3
Total property and equipment additions	4,137.3		3,909.2		3,161.6
Assets acquired under capital-related vendor financing arrangements	(1,481.5)		(975.3)		(573.5)
Assets acquired under capital leases	(106.1)		(127.2)		(143.0)
Changes in current liabilities related to capital expenditures	(50.2)		(122.3)		36.4
Total capital expenditures	\$ 2,499.5	\$	2,684.4	\$	2,481.5

<sup>(</sup>a) The amount presented for 2013 includes the post-acquisition property and equipment additions of Virgin Media from June 8, 2013 through December 31, 2013.

<sup>(</sup>b) The amount presented for 2014 includes the post-acquisition property and equipment additions of Ziggo from November 12, 2014 through December 31, 2014.

<sup>(</sup>c) The amount presented for 2015 includes the post-acquisition property and equipment additions of Choice, which was acquired on June 3, 2015.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

## Revenue by Major Category

Our revenue by major category is set forth below:

	 Year	end	led Decemb	er 3	1,
	2015		2014		2013
		iı	n millions		
Subscription revenue (a):					
Video	\$ 6,383.6	\$	6,538.3	\$	5,720.7
Broadband internet	5,079.7		4,718.5		3,535.0
Fixed-line telephony	3,162.0		3,259.5		2,506.5
Cable subscription revenue	14,625.3		14,516.3		11,762.2
Mobile subscription revenue (b)	1,037.3		1,085.6		669.9
Total subscription revenue	15,662.6		15,601.9		12,432.1
B2B revenue (c)	1,560.5		1,501.3		980.5
Other revenue (b) (d)	1,056.9		1,145.1		1,061.6
Total	\$ 18,280.0	\$	18,248.3	\$	14,474.2

- (a) Subscription revenue includes amounts received from subscribers for ongoing services, excluding installation fees and late fees. Subscription revenue from subscribers who purchase bundled services at a discounted rate is generally allocated proportionally to each service based on the standalone price for each individual service. As a result, changes in the standalone pricing of our cable and mobile products or the composition of bundles can contribute to changes in our product revenue categories from period to period.
- (b) Mobile subscription revenue excludes mobile interconnect revenue of \$212.7 million, \$245.0 million and \$175.2 million during 2015, 2014 and 2013, respectively. Mobile interconnect revenue and revenue from mobile handset sales are included in other revenue.
- (c) B2B revenue includes revenue from business broadband internet, video, voice, mobile and data services offered to medium to large enterprises and, on a wholesale basis, to other operators. We also provide services to certain small or home office (SOHO) subscribers. SOHO subscribers pay a premium price to receive expanded service levels along with video, broadband internet, fixed-line telephony or mobile services that are the same or similar to the mass marketed products offered to our residential subscribers. Revenue from SOHO subscribers, which is included in cable subscription revenue, aggregated \$321.8 million, \$220.7 million and \$158.9 million during 2015, 2014 and 2013, respectively.
- (d) Other revenue includes, among other items, interconnect, mobile handset sales, channel carriage fee and installation revenue.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

# Geographic Segments

The revenue of our geographic segments is set forth below:

	Year ended December				· 31,		
	2015		2014		2013		
		i	in millions				
Liberty Global Group:							
European Operations Division:							
U.K. (a)	\$ 6,663.	3 \$	6,941.1	\$	3,653.7		
The Netherlands (b)	2,745.	3	1,498.5		1,242.4		
Germany	2,399.	5	2,711.5		2,559.2		
Belgium	2,021.	)	2,279.4		2,185.9		
Switzerland	1,390.	3	1,414.4		1,332.1		
Poland	399.	7	469.9		460.4		
Ireland	395.	4	468.8		463.7		
Austria	367.	9	431.7		435.0		
Hungary	258.	5	310.2		313.8		
The Czech Republic	176.	5	221.0		248.9		
Romania	158.	1	173.3		163.8		
Slovakia	59.	3	74.5		74.6		
Other	9.	)	3.5		10.1		
Total European Operations Division.	17,043.	<del>-</del> -	16,997.8		13,143.6		
Other, including intersegment eliminations	18.	3	45.9		43.1		
Total Liberty Global Group	17,062.	7 —	17,043.7		13,186.7		
LiLAC Group:							
Chile	838.	1	898.5		991.6		
Puerto Rico (c)	379.	2	306.1		297.2		
Total LiLAC Group	1,217.	<del>-</del> <del>-</del>	1,204.6		1,288.8		
Inter-group eliminations			_		(1.3)		
Total	\$ 18,280.	\$	18,248.3	\$	14,474.2		

<sup>(</sup>a) The amount presented for 2013 reflects the post-acquisition revenue of Virgin Media from June 8, 2013 through December 31, 2013.

<sup>(</sup>b) The amount presented for 2014 reflects the post-acquisition revenue of Ziggo from November 12, 2014 through December 31, 2014.

<sup>(</sup>c) The amount presented for 2015 reflects the post-acquisition revenue of Choice, which was acquired on June 3, 2015.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

The long-lived assets of our geographic segments are set forth below:

	Decei	nber 31,
	2015	2014
	in n	illions
Liberty Global Group:		
European Operations Division:		
U.K	\$ 19,127.8	\$ 21,098.3
The Netherlands	14,741.7	17,092.7
Germany	7,898.9	9,117.9
Switzerland	4,117.7	4,218.9
Belgium	3,674.9	4,149.5
Austria	990.3	1,082.0
Poland	893.2	983.5
Ireland	662.1	655.9
The Czech Republic	534.8	580.4
Hungary	494.4	535.7
Romania	194.0	209.1
Slovakia	103.2	110.5
Other (a)	592.3	540.1
Total European Operations Division	54,025.3	60,374.5
U.S. and other (b)	119.6	68.9
Total Liberty Global Group	54,144.9	60,443.4
LiLAC Group:		
Puerto Rico	1,468.8	1,128.3
Chile	873.7	1,017.3
Total LiLAC Group		
Total	\$ 56,487.4	

<sup>(</sup>a) Primarily represents long-lived assets of the European Operations Division's central operations, which are located in the Netherlands.

<sup>(</sup>b) Primarily represents the assets of our corporate offices.

# Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

# (19) Quarterly Financial Information (Unaudited)

				20	15			
	1°	st quarter	2 <sup>n</sup>	d quarter	3 <sup>1</sup>	d quarter	4	th quarter
		i	n mil	lions, except	per s	hare amount	s	_
Revenue	\$	4,516.9	\$	4,566.5	\$	4,597.4	\$	4,599.2
Operating income	\$	557.5	\$	624.9	\$	545.5	\$	621.3
Net earnings (loss) attributable to Liberty Global shareholders	\$	(537.5)	\$	(464.7)	\$	133.3	\$	(283.6)
Basic and diluted earnings (loss) attributable to Liberty Global shareholders per share (note 3):								
Liberty Global Shares					\$	0.12	\$	(0.32)
LiLAC Shares					\$	0.69	\$	(0.30)
Old Liberty Global Shares	\$	(0.61)	\$	(0.53)				
				20	14			
	1 <sup>s</sup>	st quarter	2 <sup>n</sup>	d quarter	3 <sup>1</sup>	<sup>d</sup> quarter	4	<sup>th</sup> quarter
		i	n mil	lions, except	per s	hare amount	s	_
Revenue	\$	4,533.7	\$	4,602.2	\$	4,497.2	\$	4,615.2
Operating income	\$	581.7	\$	669.5	\$	703.7	\$	273.3
Net earnings (loss) attributable to Liberty Global shareholders	\$	(78.8)	\$	(249.9)	\$	157.1	\$	(523.4)
Basic and diluted earnings (loss) attributable to Liberty Global shareholders per share - Old Liberty Global Shares (note 3)	\$	(0.10)	\$	(0.32)	\$	0.20	\$	(0.62)

## Notes to Consolidated Financial Statements — (Continued) December 31, 2015, 2014 and 2013

# (20) Subsequent Event

BASE Acquisition. On February 11, 2016, pursuant to a definitive agreement and following regulatory approval, Telenet acquired BASE for a cash purchase price of €1,324.4 million (\$1,500.5 million at the transaction date) (the BASE Acquisition). BASE is the third-largest mobile network operator in Belgium. We expect that the BASE Acquisition will provide Telenet with cost-effective long-term mobile access to effectively compete for future growth opportunities in the Belgium mobile market. The BASE Acquisition was funded through a combination of €1.0 billion (\$1.1 billion at the transaction date) of new debt facilities and existing liquidity of Telenet. On February 4, 2016, the European Commission approved Telenet's acquisition of BASE following Telenet's agreement to divest both the JIM Mobile prepaid customer base and BASE's 50% stake in Viking Co NV to MEDIALAAN NV, which was announced in November 2015. Information with regard to the acquisition accounting and pro forma effect of the acquisition of BASE is not yet available.



### PART III

The capitalized terms used in Part III of this Annual Report on Form 10-K are defined in the notes to our consolidated financial statements. In the following text, the terms, "we," "our," "our company" and "us" may refer, as the context requires, to Liberty Global (or its predecessor) or collectively to Liberty Global (or its predecessor) and its subsidiaries.

Except as indicated below, the following required information is incorporated by reference to our definitive proxy statement for our 2016 Annual Meeting of Shareholders, which we intend to hold during the second quarter of 2016.

- Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE
- Item 11. EXECUTIVE COMPENSATION
- Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by Item 201(d) of Regulation S-K is included below and accordingly will not be incorporated by reference to our definitive proxy statement.

- Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE
- Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

We intend to file our definitive proxy statement for our 2016 Annual Meeting of Shareholders with the Securities and Exchange Commission on or before April 29, 2016.

# Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTERS

# Securities Authorized for Issuance Under Equity Compensation Plans

The following table sets forth information as of December 31, 2015 with respect to our ordinary shares that are authorized for issuance under our equity compensation plans.

# **Equity Compensation Plan Information**

<u>Plan Category</u>	Number of securities to be issued upon exercise of outstanding options, warrants and rights (1)(2)	exer ou optio	chted average cise price of atstanding ons, warrants rights (1)(2)	Number of securities available for future issuance under equity compensation plans (excluding securities reflected in the first column)
Equity compensation plans approved by security holders:				
Liberty Global 2014 Incentive Plan (3):				
Liberty Global Class A ordinary shares	4,486,186	\$	43.35	84,782,474
Liberty Global Class C ordinary shares	9,006,691	\$	41.85	_
LiLAC Class A ordinary shares	120,442	\$	40.02	_
LiLAC Class C ordinary shares	242,495	\$	40.63	
Liberty Global 2014 Nonemployee Director Incentive Plan (4):				
Liberty Global Class A ordinary shares	137,041	\$	44.15	10,120,239
Liberty Global Class C ordinary shares	273,297	\$	42.22	_
LiLAC Class A ordinary shares	6,844	\$	41.61	_
LiLAC Class C ordinary shares	13,682	\$	42.02	_
Liberty Global 2005 Incentive Plan (5):				
Liberty Global Class A ordinary shares	5,825,199	\$	27.02	_
Liberty Global Class C ordinary shares	17,497,705	\$	25.91	
LiLAC Class A ordinary shares	242,210	\$	26.05	
LiLAC Class C ordinary shares	723,409	\$	26.33	_
Liberty Global 2005 Director Incentive Plan (5):				
Liberty Global Class A ordinary shares	288,417	\$	17.05	_
Liberty Global Class C ordinary shares	882,353	\$	16.46	_
LiLAC Class A ordinary shares	14,389	\$	16.06	_
LiLAC Class C ordinary shares	44,060	\$	16.34	_
VM Incentive Plan (5):				
Liberty Global Class A ordinary shares	719,099	\$	24.59	
Liberty Global Class C ordinary shares	2,393,318	\$	27.16	
LiLAC Class A ordinary shares	10,667	\$	31.02	
LiLAC Class C ordinary shares	31,861	\$	31.33	_
Equity compensation plans not approved by security holders:				
None	_			_
Totals:				
Liberty Global Class A ordinary shares	11,455,942			94,902,713
Liberty Global Class C ordinary shares	30,053,364			
LiLAC Class A ordinary shares	394,552			_
LiLAC Class C ordinary shares	1,055,507			

- (1) This table includes (i) SARs with respect to 7,693,152, 18,685,347, 233,192 and 579,273 Liberty Global Class A, Liberty Global Class C, LiLAC Class A and LiLAC Class C ordinary shares, respectively, and (ii) PSARs with respect to 2,889,457, 8,629,481, 140,127 and 418,492 Liberty Global Class A, Liberty Global Class C, LiLAC Class A and LiLAC Class C ordinary shares, respectively. Upon exercise, the appreciation of a SAR, which is the difference between the base price of the SAR and the then-market value of the respective underlying class of ordinary shares or in certain cases, if lower, a specified price, may be paid in shares of the applicable class of ordinary shares. Based upon the respective market prices of Liberty Global Class A and Class C and LiLAC Class A and Class C ordinary shares at December 31, 2015 and excluding any related tax effects, 1,705,592, 4,903,433, 63,364 and 187,902 Liberty Global Class A, Liberty Global Class C, LiLAC Class A and LiLAC Class C ordinary shares, respectively, would have been issued if all outstanding SARs had been exercised on December 31, 2015. For further information, see note 13 to our consolidated financial statements.
- (2) In addition to the option, SAR and PSAR information included in this table, there are outstanding RSU, PSU and PGU awards under the various incentive plans with respect to an aggregate of 2,255,176 Liberty Global Class A ordinary shares, 666,667 Liberty Global Class B ordinary shares, 3,352,533 Liberty Global Class C ordinary shares, 88,016 LiLAC Class A ordinary shares, 33,333 LiLAC Class B ordinary shares and 114,643 LiLAC Class C ordinary shares.
- (3) The Liberty Global 2014 Incentive Plan permits grants of, or with respect to, Liberty Global or LiLAC ordinary shares subject to a single aggregate limit of 105 million shares (of which no more than 50.25 million shares may consist of Class B shares), subject to anti-dilution adjustments. As of December 31, 2015, an aggregate of 84,782,474 ordinary shares were available for issuance pursuant to the incentive plan. For further information, see note 13 to our consolidated financial statements.
- (4) The Liberty Global 2014 Nonemployee Director Incentive Plan permits grants of, or with respect to, Liberty Global or LiLAC ordinary shares subject to a single aggregate limit of 10.5 million shares, subject to anti-dilution adjustments. As of December 31, 2015, an aggregate of 10,120,239 ordinary shares were available for issuance pursuant to the Liberty Global 2014 Nonemployee Director Incentive Plan. For further information, see note 13 to our consolidated financial statements.
- (5) On January 30, 2014, our shareholders approved the Liberty Global 2014 Incentive Plan and the Liberty Global 2014 Nonemployee Director Incentive Plan and, accordingly, no further awards will be granted under the Liberty Global 2005 Incentive Plan, the Liberty Global 2005 Director Incentive Plan or the VM Incentive Plan.



#### PART IV

#### Item 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

## (a) (1) FINANCIAL STATEMENT

The financial statements required under this Item begin on page II-88 of this Annual Report on Form 10-K.

### (a) (2) FINANCIAL STATEMENT SCHEDULES

The financial statement schedules required under this Item are as follows:

Schedule I - Condensed Financial Information of Registrant (Parent Company Information):

Liberty Global plc Condensed Balance Sheets as of December 31, 2015 and 2014 (Parent Company Only)	IV-9
Liberty Global plc Condensed Statements of Operations for the years ended December 31, 2015 and 2014, and the period from June 8, 2013 to December 31, 2013 (Parent Company Only)	IV-11
Liberty Global plc Condensed Statements of Cash Flows for the years ended December 31, 2015 and 2014, and the period from June 8, 2013 to December 31, 2013 (Parent Company Only)	IV-12
Liberty Global, Inc. Condensed Statement of Operations for the period from January 1, 2013 through June 7, 2013 (Parent Company Only)	IV-13
Liberty Global, Inc. Condensed Statement of Cash Flows for the period from January 1, 2013 through June 7, 2013 (Parent Company Only)	IV-14
Schedule II - Valuation and Qualifying Accounts.	IV-15
Separate Financial Statements of Subsidiaries Not Consolidated and 50 Percent or Less Owned Persons:	
Ziggo N.V.:	
Report of Independent Auditors'	IV-16
Consolidated Balance Sheet as of December 31, 2013	IV-17
Consolidated Statement of Income for the year ended December 31, 2013	IV-19
Consolidated Statement of Comprehensive Income for the year ended December 31, 2013	IV-20
Consolidated Statement of Changes in Shareholders' Equity for the year ended December 31, 2013	IV-21
Consolidated Statement of Cash Flows for the year ended December 31, 2013	IV-22
Notes to Consolidated Financial Statements	IV-23

## (a) (3) EXHIBITS

Listed below are the exhibits filed as part of this Annual Report on Form 10-K (according to the number assigned to them in Item 601 of Regulation S-K):

- 2 -- Plan of acquisition, reorganization, arrangement, liquidation or succession:
  - 2.1 Agreement and Plan of Merger, dated as of February 5, 2013, among Virgin Media Inc. (Virgin Media), Liberty Global, Inc. (LGI), Lynx Europe Limited, Lynx US MergerCo 1 LLC, Lynx US MergerCo 2 LLC, Viper US MergerCo 1 LLC and Viper US MergerCo 2 LLC (incorporated by reference to Exhibit 2.1 to LGI's Current Report on Form 8-K filed February 7, 2013 (File No. 000-51360)).
  - 2.2 Amendment No. 1, dated as of March 6, 2013, to the Agreement and Plan of Merger, dated as of February 5, 2013, among LGI, Virgin Media, Liberty Global Corporation Limited (formerly named Lynx Europe Limited), Lynx US MergerCo 1 LLC, Lynx US MergerCo 2 LLC, Viper US MergerCo 1 LLC and Viper US MergerCo 2 LLC (incorporated by reference to Exhibit 2.1 to LGI's Current Report on Form 8-K filed March 8, 2013 (File No. 000-51360)).
  - 2.3 Rule 2.7 Announcement, dated November 16, 2015. (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K/A filed November 18, 2015 (File No. 001-35961) (the November 2015 8-K/A)).
  - 2.4 Co-operation Agreement, dated November 16, 2015, between Liberty Global plc and Cable & Wireless Communications plc (incorporated by reference to Exhibit 2.2 to the November 2015 8-K/A).
- 3 -- Articles of Incorporation and Bylaws:
  - 3.1 Articles of Association of Liberty Global plc, effective as of July 1, 2015 (incorporated by reference to Exhibit 3.1 to the Registrant's Registration Statement on Form 8-A filed June 19, 2015 (File No. 001-35961)).

- 4 -- Instruments Defining the Rights of Securities Holders, including Indentures:
  - 4.1 Senior Secured Credit Facility Agreement originally dated January 16, 2004, as amended and restated on February 9, 2016, among UPC Broadband Holding and UPC Financing as Borrowers, The Bank of Nova Scotia, as Facility Agent, the Guarantors listed therein, the Security Agent and the bank and financial institutions acceding thereto from time to time (the UPC Broadband Holding Bank Facility) (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed February 12, 2016 (File No. 001-35961)).
  - 4.2 Additional Facility AC Accession Agreement, dated November 16, 2011, among UPC Financing, as Borrower, UPC Broadband Holding, The Bank of Nova Scotia, as Facility Agent and Security Agent, and UPCB Finance V Limited, as an Additional Facility AC Lender, under the UPC Broadband Holding Bank Facility (incorporated by reference to Exhibit 4.4 to LGI's Annual Report on Form 10-K filed February 22, 2012 (File No. 000-51360) (the LGI 2011 10-K)).
  - 4.3 Additional Facility AD Accession Agreement, dated February 7, 2012, among UPC Financing, as Borrower, UPC Broadband Holding, The Bank of Nova Scotia, as Facility Agent and Security Agent, and UPCB Finance VI Limited, as an Additional Facility AD Lender, under the UPC Broadband Holding Bank Facility (incorporated by reference to Exhibit 4.48 to the LGI 2011 10-K).
  - 4.4 Additional Facility AH Accession Agreement, dated April 19, 2013, among UPC Financing as Borrower, The Bank of Nova Scotia as Facility Agent and Security Agent and Liberty Global Services B.V. as Additional Facility AH Lender, under the UPC Broadband Holding Bank Facility (incorporated by reference to Exhibit 4.1 to LGI's Current Report on Form 8-K filed April 23, 2013) (File No. 000-51360)).
  - 4.5 Indenture dated April 15, 2015, among UPCB Finance IV Limited, The Bank of New York Mellon, London Branch as Trustee, Principal Paying Agent, Transfer Agent and Security Agent, The Bank of New York Mellon as New York Paying Agent, New York Transfer Agent and Dollar Notes Registrar and The Bank of New York Mellon (Luxembourg) S.A. as Euro Notes Registrar and Transfer Agent (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K/A filed April 21, 2015 (File No. 001-35961) (the April 2015 8-K/A)).
  - 4.6 Additional Facility AK Accession Agreement, dated April 15, 2015, among UPC Financing as Borrower, The Bank of Nova Scotia as Facility Agent and Security Agent, UPC Broadband Holding and UPCB Finance IV Limited as Additional Facility AK Lender, under the UPC Broadband Holding Credit Facility (incorporated by reference to Exhibit 4.2 to the April 2015 8-K/A).
  - 4.7 Additional Facility AL Accession Agreement, dated April 15, 2015, among UPC Financing as Borrower, The Bank of Nova Scotia as Facility Agent and Security Agent, UPC Broadband Holding and UPCB Finance IV Limited as Additional Facility AL Lender, under the UPC Broadband Holding Credit Facility (incorporated by reference to Exhibit 4.3 to the April 2015 8-K/A).
  - 4.8 Additional Facility AL2 Accession Agreement, dated May 20, 2015, among UPC Financing as Borrower, The Bank of New York Nova Scotia as Facility Agent and Security Agent, UPC Broadband Holding and UPCB Finance IV Limited as Additional Facility AL2 Lender, under the UPC Broadband Holding Credit Facility (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K/A filed May 21, 2015 (File No. 001-35961)).
  - 4.9 Additional Facility AM Accession Agreement, dated August 3, 2015, among UPC Financing as Borrower, The Bank of Nova Scotia as Facility Agent and Security Agent and the financial institutions listed therein as Additional Facility AM Lenders, under the UPC Broadband Holding Bank Facility (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed August 6, 2015 (File No. 001-35961)).
  - 4.10 €2,300,000,000 Credit Agreement, originally dated August 1, 2007, and as amended and restated by supplemental agreements dated August 22, 2007, September 11, 2007, October 8, 2007, June 23, 2009, August 25, 2009, October 4, 2010 and further amended and restated on November 2, 2015 among Telenet N.V. as Borrower, The Bank of Nova Scotia N.V. as Facility Agent, the parties listed therein as Original Guarantors, ABN AMRO Bank N.V., BNP Paribas S.A. and J.P. Morgan PLC as Mandated Lead Arrangers, KBC Bank N.V. as Security Agent, and the financial institutions listed therein as Initial Original Lenders (the Telenet Credit Facility) (incorporated by reference to Exhibit 4.1 to Registrants's Current Report on Form 8-K filed November 6, 2015 (File No. 000-35961)).
  - 4.11 Additional Facility O Accession Agreement, dated February 15, 2011, among, inter alia, Telenet International Finance S.à.r.l. (Telenet International) as Borrower, Telenet N.V. and Telenet International as Guarantors, The Bank of Nova Scotia as Facility Agent, KBC Bank N.V. as Security Agent and Telenet Finance III Luxembourg S.C.A. as an additional Facility O Lender, under the Telenet Credit Facility (incorporated by reference to Exhibit 4.52 to LGI's Annual Report on Form 10-K filed February 24, 2011 (File No. 000-51360) (the LGI 2010 10-K)).
  - 4.12 Telenet Additional Facility P Accession Agreement, dated June 15, 2011, among, inter alia, Telenet International as Borrower, Telenet N.V. and Telenet International as Guarantors, The Bank of Nova Scotia as Facility Agent, KBC Bank N.V. as Security Agent and Telenet Luxembourg Finance Center S.â.r.l. as an additional Facility Q Lender, under the Telenet Credit Facility (incorporated by reference to Exhibit 4.1 to LGI's Quarterly Report on Form 10-Q filed August 2, 2011 (File No. 000-51360)).
  - 4.13 Telenet Additional Facility U Accession Agreement, dated August 16, 2012, among, inter alia, Telenet International as Borrower, Telenet N.V. and Telenet International as Guarantors, The Bank of Nova Scotia as Facility Agent, KBC Bank N.V. as Security Agent and the financial institutions listed therein as additional Facility U Lenders, under the Telenet Credit Facility (incorporated by reference to Exhibit 4.2 to LGI's Quarterly Report on Form 10-Q filed November 5, 2012 (File No. 000-51360) (the LGI November 5, 2012 10-Q)).

- 4.14 Telenet Additional Facility V Accession Agreement, dated August 16, 2012, among, inter alia, Telenet International as Borrower, Telenet N.V. and Telenet International as Guarantors, The Bank of Nova Scotia as Facility Agent, KBC Bank N.V. as Security Agent and the financial institutions listed therein as additional Facility V Lenders, under the Telenet Credit Facility (incorporated by reference to Exhibit 4.3 to the LGI November 5, 2012 10-Q).
- 4.15 Telenet Additional Facility W Accession Agreement, dated April 9, 2014, among, inter alia, Telenet International as Borrower, Telenet N.V. and Telenet International as Guarantors, The Bank of Nova Scotia as Facility Agent, KBC Bank N.V. as Security Agent and the financial institutions listed therein as Additional Facility W Lenders, under the Telenet Credit Facility (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed April 15, 2014 (File No.001-35961) (the April 15, 2014 8-K)).
- 4.16 Telenet Additional Facility Y Accession Agreement, dated April 9, 2014, among, inter alia, Telenet International as Borrower, Telenet N.V. and Telenet International as Guarantors, The Bank of Nova Scotia as Facility Agent, KBC Bank N.V. as Security Agent and the financial institutions listed therein as Additional Facility Y Lenders, under the Telenet Credit Facility (incorporated by reference to Exhibit 4.2 to the April 15, 2014 8-K).
- 4.17 Telenet Additional Facility X Accession Agreement, dated April 11, 2014, among, inter alia, Telenet International as Borrower, Telenet N.V. and Telenet International as Guarantors, The Bank of Nova Scotia as Facility Agent, KBC Bank N.V. as Security Agent and the financial institutions listed therein as Additional Facility X Lenders, under the Telenet Credit Facility (incorporated by reference to Exhibit 4.3 to the April 15, 2014 8-K).
- 4.18 Additional Facility Z Accession Agreement, dated May 7, 2015, between, among others, Telenet International as Borrower, Telenet N.V., The Bank of Nova Scotia as Facility Agent, KBC Bank N.V. Security Agent and The Royal Bank of Scotland PLC, Societe Generale, London Branch, Deutsche Bank AG, London Branch, Credit Suisse AG, London Branch, ScotiaBank Europe PLC and Goldman Sachs Bank USA as Additional Facility Z Lenders, under the Telenet Credit Facility (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed May 13, 2015 (File No. 001-35961) (the May 2015 8-K)).
- 4.19 Additional Facility AA Accession Agreement, dated May 7, 2015, between, among others, Telenet International as Borrower, Telenet N.V., The Bank of Nova Scotia as Facility Agent, KBC Bank N.V. Security Agent and The Royal Bank of Scotland PLC, Societe Generale, London Branch, Deutsche Bank AG, London Branch, Credit Suisse AG, London Branch, The Bank of Nova Scotia and Goldman Sachs Bank USA as Additional Facility AA Lenders, under the Telenet Credit Facility (incorporated by reference to Exhibit 4.2 to the May 2015 8-K).
- 4.20 Telenet Additional Facility X2 Accession Agreement, dated July 1, 2015, among inter alia, Telenet International as Borrower, Telenet N.V. and Telenet International as Guarantors, The Bank of Nova Scotia as Facility Agent, KBC Bank N.V. as Security Agent and the financial institutions listed therein as Additional Facility X2 Lenders, under the Telenet Credit Facility (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed July 8, 2015 (File No. 001-35961)).
- 4.21 Telenet Additional Facility AB Accession Agreement, dated July 24, 2015, among, inter alia, Telenet International as Borrower, Telenet N.V. and Telenet International as Guarantors, and the other parties thereto, under the Telenet Credit Facility (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed July 30, 2015 (File No. 001-35061)).
- 4.22 Indenture dated December 14, 2012 between Unitymedia Hessen GmbH & Co. KG, Unitymedia NRW GmbH, The Bank of New York Mellon, London Branch, as trustee, transfer agent and principal paying agent, The Bank of New York Mellon as New York paying agent and New York transfer agent, The Bank of New York Mellon (Luxembourg) S.A. as registar and Credit Suisse AG, London Branch, as security trustee (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed December 20, 2012 (File No. 000-51360)).
- 4.23 Indenture dated December 17, 2014 between Unitymedia Hessen GmbH & Co. KG, Unitymedia NRW GmbH, The Bank of New York Mellon, London Branch, as trustee, transfer agent and principal paying agent, The Bank of New York Mellon as New York paying agent and New York transfer agent, The Bank of New York Mellon (Luxembourg) S.A. as registar and Credit Suisse AG, London Branch, as security trustee (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K/A filed December 18, 2014 (File No. 001-35961)).
- 4.24 Indenture for 6.50% Convertible Senior Notes due 2016, dated as of April 16, 2008, between Virgin Media Inc. (Virgin Media) and The Bank of New York, as trustee (including form of 6.50% Convertible Senior Note due 2016) (incorporated by reference to Exhibit 4.1 to Virgin Media's Current Report on Form 8-K filed on April 16, 2008 (File No. 000-50886) (the Virgin Media April 2008 8-K)).
- 4.25 Registration Rights Agreement for 6.50% Convertible Senior Notes due 2016, dated as of April 16, 2008, between Virgin Media and Goldman, Sachs & Co., Deutsche Bank Securities Inc. and J.P. Morgan Securities Inc. (incorporated by reference to Exhibit 4.2 to the Virgin Media April 2008 8-K).
- 4.26 Supplemental Indenture, dated as of June 7, 2013, among the Registrant, Viper US MergerCo 1 Corp. (now known as Virgin Media) and The Bank of New York Mellon, as Trustee, to the Indenture dated as of April 16, 2008 for 6.50% Convertible Senior Notes due 2016 (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed June 12, 2013 (File No. 001-35961) (the June 12, 2013 8-K)).
- 4.27 Second Supplemental Indenture, dated as of March 3, 2014, among Virgin Media, the Registrant and the Bank of New York Mellon as trustee to the Indenture, dated as of April 16, 2008, as amended and supplemented, for the Virgin Media 6.5% Convertible Senior Notes due 2016 (incorporated by reference to Exhibit 4.4 to the Registrant's Quarterly Report on Form 10-Q filed May 6, 2014 (File No. 001-35961) (the May 6, 2014 10-Q)).

- 4.28 Amended and Restated Third Supplemental Indenture, dated as of July 17, 2015 and effective as of July 1, 2015, among Virgin Media the Registrant and the Bank of New York Mellon as trustee to the Indenture, dated as of April 16, 2008, as amended and supplemented, for the Virgin Media 6.5% Convertible Senior Notes due 2016 (incorporated by reference to Exhibit 4.14 for the Registrant's Quarterly Report on Form 10-Q filed August 4, 2015 (File No. 001-35061)) (the August 4, 2015 10-Q)).
- 4.29 Indenture, dated as of March 3, 2011, among Virgin Media Secured Finance PLC, the guarantors party thereto, The Bank of New York Mellon as trustee and paying agent and The Bank of New York Mellon (Luxembourg) S.A. as Luxembourg paying agent (incorporated by reference to Exhibit 4.1 to Virgin Media's Current Report on Form 8-K filed on March 3, 2011 (File No. 000-50886)).
- 4.30 Indenture dated February 22, 2013, between, among others, Lynx I Corp., as issuer, The Bank of New York Mellon, London Branch, as trustee, transfer agent and principal paying agent and The Bank of New York Mellon, as paying agents and Newco security trustee (incorporated by reference to Exhibit 4.1 to LGI's Current Report on Form 8-K/A filed February 27, 2013 (File No. 000-51360) (the LGI February 2013 8-K/A)).
- 4.31 Indenture, dated as of February 22, 2013, among Lynx II Corp., as issuer, The Bank of New York Mellon, London Branch, as trustee, transfer agent and principal paying agent and The Bank of New York Mellon, as paying agents and Newco security trustee (incorporated by reference to Exhibit 4.2 to the LGI February 2013 8-K/A).
- 4.32 First Supplemental Indenture, dated as of June 7, 2013, between, among others, Virgin Media Secured Finance PLC, Virgin Media and The Bank of New York Mellon as trustee, to the Indenture dated as of March 3, 2011 for Virgin Media 5.25% Senior Secured Notes and 5.50% Senior Secured Notes each due 2021 (incorporated by reference to Exhibit 4.12 to the June 12, 2013 8-K).
- 4.33 Accession Agreement, dated as of June 7, 2013, among Virgin Media Secured Finance PLC, as acceding issuer, Lynx I Corp. and The Bank of New York Mellon, as trustee (incorporated by reference to Exhibit 4.13 to the June 12, 2013 8-K).
- 4.34 First Supplemental Indenture, dated as of June 7, 2013, between, among others, Virgin Media Secured Finance PLC and The Bank of New York Mellon, as trustee, to the Indenture dated as of February 22, 2013 for Lynx I Corp. 51/81/86 Senior Secured Notes and 6.00% Senior Secured Notes each due 2021 (incorporated by reference to Exhibit 4.15 to the June 12, 2013 8-K).
- 4.35 Accession Agreement, dated as of June 7, 2013, among Lynx II Corp., Virgin Media Finance PLC and The Bank of New York Mellon, as trustee and paying agent (incorporated by reference to Exhibit 4.16 to the June 12, 2013 8-K).
- 4.36 First Supplemental Indenture, dated June 7, 2013, between, among others, Virgin Media Finance PLC, Virgin Media and The Bank of New York Mellon, as trustee and paying agent, to the Indenture dated as of February 22, 2013 Lynx II Corp. 63% Senior Notes and 7.00% Senior Notes each due 2023 (incorporated by reference to Exhibit 4.19 to the June 12, 2013 8-K).
- 4.37 Amendment dated June 14, 2013, to the Senior Facilities Agreement, between, and among others, Virgin Media Investment Holdings Limited, certain other subsidiaries of Virgin Media and the lenders thereto (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed June 21, 2013 (File No. 001-35961)).
- 4.38 Senior Facilities Agreement, dated as of June 7, 2013, as amended on June 14, 2013 and as amended and restated on July 30 2015, among, among others, Virgin Media Finance PLC, certain other subsidiaries of Virgin Media and the lenders thereto (the VMF Senior Facilities Agreement) (incorporated by reference to Exhibit 4.13 to the August 4, 2015 10-Q).
- 4.39 Indenture dated March 28, 2014 between Virgin Media Secured Finance PLC, The Bank of New York Mellon, London Branch, as trustee, transfer agent and principal paying agent, The Bank of New York Mellon as paying agent, and The Bank of New York Mellon (Luxembourg) S.A., as registrar (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K/A filed April 3, 2014 (File No. 001-35961)).
- 4.40 Virgin Additional Facility D Accession Agreement, dated April 17, 2014, among, inter alia, Virgin Media SFA Finance Limited as Borrower, certain other subsidiaries of Virgin Media, The Bank of Nova Scotia as Facility Agent and the financial institutions listed therein as Additional Facility D Lenders, under the VMF Senior Facilities Agreement (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed April 23, 2014 (File No. 001-35961) (the April 23, 2014 8-K)).
- 4.41 Virgin Additional Facility E Accession Agreement, dated April 17, 2014, among, inter alia, Virgin Media SFA Finance Limited as Borrower, certain other subsidiaries of Virgin Media, The Bank of Nova Scotia as Facility Agent and the financial institutions listed therein as Additional Facility E Lenders, under the VMF Senior Facilities Agreement (incorporated by reference to Exhibit 4.2 to the April 23, 2014 8-K).
- 4.42 Indenture dated January 28, 2015 between Virgin Media Secured Finance PLC, The Bank of New York Mellon, London Branch, as trustee and paying agent and The Bank of New York Mellon (Luxembourg) S.A., as registrar and transfer agent (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K/A filed February 3, 2015 (File No. 001-35961) (the February 3, 2015 8-K/A)).
- 4.43 Indenture dated January 28, 2015 between Virgin Media Finance PLC, The Bank of New York Mellon, London Branch, as trustee and principal paying agent, The Bank of Mellon as paying agent and Dollar Notes transfer agent and registrar and The Bank of New York Mellon (Luxembourg) S.A., as Euro Notes registrar and transfer agent (incorporated by reference to Exhibit 4.2 to the February 3, 2015 8-K/A).

- 4.44 Additional Facility F Accession Agreement, dated May 29, 2015, among Virgin Media Bristol LLC as Borrower, The Bank of Nova Scotia as Facility Agent, Virgin Media Communications Networks Limited and the Bank of Nova Scotia as Additional Facility F Lender, under the VMF Senior Facilities Agreement (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed June 4, 2015 (File No. 001-35961)).
- 4.45 Indenture dated January 24, 2014, between VTR Finance B.V., the Bank of New York Mellon, London Branch, as trustee and security agent, and the Bank of New York Mellon as paying agent, registrar and transfer agent (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed January 24, 2014 (File No. 001-35961)).
- 4.46 Indenture dated January 29, 2015 between Ziggo Bond Finance B.V., Deutsche Trustee Company Limited as trustee and security trustee, Deutsche Bank Trust Company Americas as Dollar Notes paying agent, registrar and transfer agent, Deutsche Bank AG London Branch as Euro Notes paying agent and Deutsche Bank Luxembourg S.A. as Euro Notes registrar and transfer agent (incorporated by reference to Exhibit 4.3 to the February 3, 2015 8-K/A).
- 4.47 Indenture dated February 4, 2015 between Ziggo Secured Finance B.V., Deutsche Trustee Company Limited as trustee and security trustee, Deutsche Bank AG London Branch as paying agent and Deutsche Bank Luxembourg S.A. as registrar and transfer agent (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K/A filed February 10, 2015 (File No. 001-35961)).
- 4.48 Senior Facilities Agreement, dated January 27, 2014, as amended and restated by a Supplemental Agreement dated February 10, 2014, between, among others, Amsterdamse Beheer-En Consultingmaatschappij B.V., Ziggo B.V., certain subsidiaries of Ziggo, Bank of America Merrill Lynch International Limited and Credit Suisse AG, London Branch as global coordinators, and the other lenders thereto (the Ziggo Senior Facilities Agreement) (incorporated by reference to Exhibit 4.54 to the Registrant's Annual Report on Form 10-K filed February 13, 2015 (File No. 001-35961)).
- 4.49 Amended and Restated First Lien Credit Agreement dated as of July 7, 2014, among Liberty Cablevision of Puerto Rico LLC (Liberty Puerto Rico), the guarantors party thereto from time to time, The Bank of Nova Scotia, as Administrative Agent, each lender form time to time party thereto and Scotiabank de Puerto Rico as L/C Issuer and Swing Line Lender (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed July 2, 2015 (File No. 001-35961) (the July 2015 8-K)).
- 4.50 Amended and Restated Second Lien Credit Agreement dated as of July 7, 2014, among Liberty Puerto Rico, the guarantors party thereto from time to time, The Bank of Nova Scotia, as Administrative Agent, and each lender from time to time party thereto (incorporated by reference to Exhibit 4.2 to the July 2015 8-K).
- 4.51 Additional Term B-1 Facility Joinder Agreement dated as of June 1, 2015, among Liberty Puerto Rico, The Bank of Nova Scotia as Administrative Agent and Collateral Agent and the Additional Term B-1 Facility Lenders party thereto (incorporated by reference to Exhibit 4.3 to the July 2015 8-K).
- 4.52 Additional Term B-2 Facility Joinder Agreement dated as of June 1, 2015, among Liberty Puerto Rico, The Bank of Nova Scotia as Administrative Agent and Collateral Agent and the Additional Term B-2 Facility Lenders party thereto (incorporated by reference to Exhibit 4.4 to the July 2015 8-K).
  - The Registrant undertakes to furnish to the Securities and Exchange Commission, upon request, a copy of all instruments with respect to long-term debt not filed herewith.

#### 10 -- Material Contracts:

- 10.1 Deed of Assumption of Liberty Global plc, dated June 7, 2013 (incorporated by reference to Exhibit 10.1 to the June 7, 2013 8-K).
- 10.2 Liberty Global 2014 Incentive Plan Effective March 1, 2014 as amended and restated February 24, 2015 (the Incentive Plan) (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed May 7, 2015 (File No. 001-35961)).
- 10.3 Liberty Global 2014 Nonemployee Director Incentive Plan Effective March 1, 2014 (the Director Plan) (incorporated by reference to Appendix B to the Registrant's Proxy Statement on Schedule 14A filed December 19, 2013 (File No. 001-35961)).
- 10.4 Form of Performance Share Units Agreement under the Incentive Plan (incorporated by reference to Exhibit 10.6 to the May 6, 2014 10-Q).
- 10.5 Form of Performance Share Units Agreement under the Incentive Plan (incorporated by reference to Exhibit 10.1 to the August 4, 2015 10-Q).
- 10.6 Form of Non-Qualified Share Option Agreement under the Director Plan (incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed August 5, 2014 (File No. 001-35961) (the August 5, 2014 10-Q)).
- 10.7 Form of Restricted Share Units Agreement under the Director Plan (incorporated by reference to Exhibit 10.4 to the August 5, 2014 10-Q).
- 10.8 Form of Share Appreciation Rights Agreement under the Incentive Plan (incorporated by reference to Exhibit 10.5 to the August 5, 2014 10-Q).
- 10.9 Form of Restricted Share Units Agreement under the Incentive Plan (incorporated by reference to Exhibit 10.6 to the August 5, 2014 10-Q).

- 10.10 Liberty Global, Inc. 2005 Incentive Plan (as amended and restated effective June 7, 2013) (the 2005 Incentive Plan) (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed June 7, 2013 (File No. 001-35961) (the June 7, 2013 8-K)).
- 10.11 Liberty Global, Inc. 2005 Nonemployee Director Incentive Plan (as amended and restated effective June 7, 2013) (the 2005 Director Plan) (incorporated by reference to Exhibit 10.3 to the June 7, 2013 8-K).
- 10.12 Virgin Media 2010 Stock Incentive Plan (as amended and restated effective June 7, 2013) (incorporated by reference to Exhibit 10.4 to the June 7, 2013 8-K).
- 10.13 Form of Non-Qualified Share Option Agreement under the 2005 Director Plan (incorporated by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q filed August 1, 2013 (File No. 001-35961) (the August 1, 2013 10-Q)).
- 10.14 Liberty Global Compensation Policy for Nonemployee Directors effective June 26, 2014 (incorporated by reference to Appendix A to the Registrant's Proxy Statement on Schedule 14A filed April 30, 2014 (File No. 001-35961)).
- 10.15 Form of Deed of Indemnity between Liberty Global and its Directors and Executive Officers (incorporated by reference to Exhibit 10.10 to the June 7, 2013 8-K).
- 10.16 Form of the Non-Qualified Stock Option Agreement under the 2005 Incentive Plan (incorporated by reference to Exhibit 10.2 to the LGI 2010 10-K).
- 10.17 Form of Stock Appreciation Rights Agreement under the 2005 Incentive Plan (incorporated by reference to Exhibit 10.3 to LGI's Quarterly Report on Form 10-Q filed May 7, 2008 (File No. 000-51360) (the LGI May 7, 2008 10-Q)).
- 10.18 Form of Restricted Share Units Agreement under the 2005 Incentive Plan (incorporated by reference to Exhibit 10.1 to the LGI May 7, 2008 10-Q).
- 10.19 Form of Restricted Share Units Agreement under the 2005 Director Plan (incorporated by reference to Exhibit 10.2 to LGI's Quarterly Report on Form 10-Q filed August 4, 2009 (File No. 000-51360)).
- 10.20 Liberty Global Challenge Performance Award Program for executive officers under the 2005 Incentive Plan (description of said program is incorporated by reference to the description thereof included in Item 5.02(e) of the Registrant's Current Report on Form 8-K filed June 28, 2013 (File No. 001-35961)).
- 10.21 Form of Performance Share Appreciation Rights Agreement under the 2005 Incentive Plan (incorporated by reference to Exhibit 10.5 to the August 1, 2013 10-Q).
- 10.22 Liberty Global 2014 Annual Cash Performance Award Program for executive officers under the Incentive Plan (description of said program is incorporated by reference to the description thereof included in Item 5.02(e) of the Registrant's Current Report on Form 8-K filed April 4, 2014 (File No. 001-35961) (the April 4, 2014 8-K)).
- 10.23 Liberty Global 2014 Performance Incentive Plan for executive officers under the Incentive Plan (a description of said plan is incorporated by reference to the description thereof included in Item 5.02(e) of the April 4, 2014 8-K).
- 10.24 Liberty Global 2015 Annual Cash Performance Award Program for executive officers under the Incentive Plan (description of said program is incorporated by reference to the description thereof included in Item 5.02(e) of the Registrant's Current Report on Form 8-K filed March 25, 2015 (File No. 001-35961) (the March 2015 8-K)).
- 10.25 Liberty Global 2015 Performance Incentive Plan for executive officers under the Incentive Plan (a description of said plan is incorporated by reference to the description thereof included in the 5.02(e) of the March 2015 8-K).
- 10.26 Liberty Global, Inc. 2013 Performance Incentive Plan for executive officers under the 2005 Incentive Plan (a description of said plan is incorporated by reference to the description thereof included in Item 5.02(e) of LGI's Current Report Form 8-K filed April 4, 2013 (File No. 000-51360)).
- 10.27 Form of Performance Share Units Agreement under the 2005 Incentive Plan (incorporated by reference to Exhibit 10.5 to LGI's Quarterly Report on Form 10-Q filed May 4, 2011 (File No. 000-51360)).
- 10.28 Form of Share Grant and Restricted Shares Award in Settlement of Performance Share Units Agreement under the 2005 Incentive Plan (incorporated by reference to Exhibit 10.18 to LGI's Annual Report on Form 10-K/A filed February 13, 2013 (File No. 000-51360) (the LGI 2012 10-K)).
- 10.29 Deferred Compensation Plan (adopted effective December 15, 2008; Amended and Restated as of (October 26, 2015).\*
- 10.30 Nonemployee Director Deferred Compensation Plan (As Amended and Restated Effective December 11, 2015).\*
- 10.31 Personal Usage of Aircraft Policy, restated June 7, 2013\*
- 10.32 Form of Aircraft Time Sharing Agreement (900EX) (incorporated by reference to Exhibit 10.29 to the LGI 2012 10-K)
- 10.33 Form of Aircraft Time Sharing Agreement (7X) (incorporated by reference to Exhibit 10.30 to the LGI 2012 10-K).
- 10.34 Employment Agreement dated as of April 30, 2014, by and among the Registrant, LGI and Michael T. Fries (incorporated by reference to Exhibit 10.7 to the May 6, 2014 10-Q).
- 10.35 Form of Performance Grant Award Agreement under the Incentive Plan dated as of April 30, 2014, between the Registrant and Michael T. Fries (incorporated by reference to Exhibit 10.8 to the May 6, 2014 10-Q).

- 10.36 Executive Service Agreement, dated December 15, 2004, between UPC Services Limited and Charles Bracken (incorporated by reference to Exhibit 10.36 to LGI's Annual Report on Form 10-K filed February 24, 2010) (File No. 000-51360)).
- 10.37 Executive Services Agreement effective January 1, 2011, between Liberty Global Europe B.V. and Diederik Karsten (incorporated by reference to Exhibit 10.45 to the LGI 2010 10-K).
- 10.38 Trade Mark Licence, dated as of April 3, 2006, between Virgin Enterprises Limited and NTL Group Limited (incorporated by reference to Exhibit 10.2 to Virgin Media's Quarterly Report on Form 10-Q filed on August 9, 2006 (File No. 000-50886)).
- 10.39 Amendment Letter No. 1, dated February 8, 2007, to the Trade Mark Licence between Virgin Enterprises Limited and Virgin Media Limited dated April 3, 2006 (incorporated by reference to Exhibit 10.5 to Virgin Media's Quarterly Report on Form 10-Q filed on August 8, 2007 (File No. 000-50886)).
- 10.40 Amendment Letter No. 2, dated October 1, 2007, to the Trade Mark Licence between Virgin Enterprises Limited and Virgin Media Limited dated April 3, 2006 (incorporated by reference to Exhibit 10.6 to Virgin Media's Quarterly Report on form 10-Q filed on November 8, 2007 (File No. 000-50886)).
- 10.41 Trade Mark Licence between Virgin Enterprises Limited and Virgin Media Limited dated December 16, 2009 (incorporated by reference to Exhibit 10.83 to Virgin Media's Annual Report on Form 10-K filed on February 26, 2010 (File No. 000-50886)).
- 10.42 Merger Protocol dated January 27, 2014, among LGE Holdco VII B.V., Ziggo N.V. and the Registrant (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed January 31, 2014 (File No. 001-35961)).
- 21 -- List of Subsidiaries\*
- 23 -- Consent of Experts and Counsel:
  - 23.1 Consent of KPMG LLP\*
  - 23.2 Consent of Ernst & Young Accountants LLP\*
- 31 -- Rule 13a-14(a)/15d-14(a) Certification:
  - 31.1 Certification of President and Chief Executive Officer\*
  - 31.2 Certification of Executive Vice President and Co-Chief Financial Officer (Principal Financial Officer)\*
  - 31.3 Certification of Executive Vice President and Co-Chief Financial Officer (Principal Accounting Officer)\*
- 32 -- Section 1350 Certification \*\*
- 101.INS XBRL Instance Document\*
- 101.SCH XBRL Taxonomy Extension Schema Document\*
- 101.CAL XBRL Taxonomy Extension Calculation Linkbase Document\*
- 101.DEF XBRL Taxonomy Extension Definition Linkbase\*
- 101.LAB XBRL Taxonomy Extension Label Linkbase Document\*
- 101.PRE XBRL Taxonomy Extension Presentation Linkbase Document\*

<sup>\*</sup> Filed with the Registrant's Form 10-K dated February 12, 2016

<sup>\*\*</sup> Furnished with the Registrant's Form 10-K dated February 12, 2016

## **SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

# LIBERTY GLOBAL PLC

Dated: February 12, 2016	/s/ BRYAN H. HALL
	Bryan H. Hall Executive Vice President, General Counsel and Secretary

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the date indicated.

Signature	Title	Date
/s/ JOHN C. MALONE John C. Malone	Chairman of the Board	February 12, 2016
/s/ MICHAEL T. FRIES Michael T. Fries	President, Chief Executive Officer and Director	February 12, 2016
/s/ ANDREW J. COLE Andrew J. Cole	Director	February 12, 2016
/s/ JOHN P. COLE John P. Cole	Director	February 12, 2016
/s/ MIRANDA CURTIS Miranda Curtis	Director	February 12, 2016
/s/ JOHN W. DICK John W. Dick	Director	February 12, 2016
/s/ PAUL A. GOULD Paul A. Gould	Director	February 12, 2016
/s/ RICHARD R. GREEN Richard R. Green	Director	February 12, 2016
David E. Rapley	Director	
/s/ LARRY E. ROMRELL Larry E. Romrell	Director	February 12, 2016
/s/ J.C. SPARKMAN  J.C. Sparkman	Director	February 12, 2016
/s/ J. DAVID WARGO  J. David Wargo	Director	February 12, 2016
/s/ CHARLES H.R. BRACKEN Charles H.R. Bracken	Executive Vice President and Co-Chief Financial Officer (Principal Financial Officer)	February 12, 2016
/s/ BERNARD G. DVORAK Bernard G. Dvorak	Executive Vice President and Co-Chief Financial Officer (Principal Accounting Officer)	February 12, 2016

#### ATTRIBUTED FINANCIAL INFORMATION

Unless otherwise defined herein, the capitalized terms used herein are defined in Part II of our 2015 Annual Report on Form 10-K (our **2015 Annual Report**). The financial information presented herein should be read in conjunction with the financial information and related discussion and analysis included in our 2015 Annual Report. In the following text, the terms "we," "our," "our company" and "us" may refer, as the context requires, to Liberty Global or collectively to Liberty Global and its subsidiaries.

The following tables present our assets, liabilities, revenue, expenses and cash flows that are intended to track and reflect the separate economic performance of the businesses and assets attributed to (i) the Liberty Global Group and (ii) the LiLAC Group. For additional information regarding our tracking shares, see note 1 to our consolidated financial statements included in our 2015 Annual Report.

The attributed financial information presented herein has been prepared assuming this attribution had been completed as of January 1, 2013. However, this attribution of historical financial information does not necessarily represent the actual results and balances that would have occurred if such attribution had actually been in place during the periods presented.

### ATTRIBUTED BALANCE SHEET INFORMATION December 31, 2015 (unaudited)

	Attrib	uted to:			
	Liberty Global Group	LiLAC Group	Inter-group eliminations	Consolidated Liberty Global	
		in	millions		
ASSETS					
Current assets:					
Cash and cash equivalents	\$ 707.6	\$ 274.5	\$ —	\$ 982.1	
Trade receivables, net	1,376.2	91.5	_	1,467.7	
Derivative instruments	405.9	16.0	_	421.9	
Prepaid expenses	132.0	12.2	_	144.2	
Other current assets	305.7	44.8	(9.0)	341.5	
Total current assets	2,927.4	439.0	(9.0)	3,357.4	
Investments	2,839.6			2,839.6	
Property and equipment, net	20,840.5	843.5		21,684.0	
Goodwill	26,244.8	775.6	_	27,020.4	
Intangible assets subject to amortization, net	6,975.1	117.4	_	7,092.5	
Other assets, net (notes 2 and 4)	4,782.9	1,092.0	(1.6)	5,873.3	
Total assets	\$ 64,610.3	\$ 3,267.5	\$ (10.6)	\$ 67,867.2	

# ATTRIBUTED BALANCE SHEET INFORMATION — (Continued) December 31, 2015 (unaudited)

	Attribu	ited to:		
	Liberty Global Group	LiLAC Group	Inter-group eliminations	Consolidated Liberty Global
		in	millions	
LIABILITIES AND EQUITY				
Current liabilities:				
Accounts payable	\$ 995.9	\$ 54.2	\$ —	\$ 1,050.1
Deferred revenue and advance payments from subscribers and others	1,347.7	45.8	_	1,393.5
Current portion of debt and capital lease obligations	2,537.1	0.8	_	2,537.9
Accrued interest	776.5	56.3	_	832.8
Accrued income taxes	445.6	37.9		483.5
Accrued capital expenditures	418.5	23.3	_	441.8
Derivative instruments	346.3		_	346.3
Other accrued and current liabilities	1,899.7	181.3	(9.0)	2,072.0
Total current liabilities	8,767.3	399.6	(9.0)	9,157.9
Long-term debt and capital lease obligations (note 4)	42,186.5	2,334.0	(1.1)	44,519.4
Other long-term liabilities (note 2)	3,751.9	264.2	(0.5)	4,015.6
Total liabilities	54,705.7	2,997.8	(10.6)	57,692.9
Equity attributable to Liberty Global shareholders	10,446.0	206.4		10,652.4
Noncontrolling interests	(541.4)	63.3	_	(478.1)
Total equity	9,904.6	269.7		10,174.3
Total liabilities and equity	\$ 64,610.3	\$ 3,267.5	\$ (10.6)	\$ 67,867.2

### ATTRIBUTED BALANCE SHEET INFORMATION December 31, 2014 (unaudited)

	Attribu	ited to:		
	Liberty Global Group	LiLAC Group	Inter-group eliminations	Consolidated Liberty Global
		in	millions	
ASSETS				
Current assets:				
Cash and cash equivalents	\$ 1,051.4	\$ 107.1	\$ —	\$ 1,158.5
Trade receivables, net	1,374.9	124.6	_	1,499.5
Derivative instruments.	445.5	1.1	_	446.6
Prepaid expenses	179.0	10.7	_	189.7
Deferred income taxes (note 2)	275.6	14.7	_	290.3
Other current assets	266.0	73.9	(4.0)	335.9
Total current assets	3,592.4	332.1	(4.0)	3,920.5
Investments	1,808.2	_	_	1,808.2
Property and equipment, net	23,016.0	824.6	_	23,840.6
Goodwill	28,214.3	28,214.3 787.3	_	29,001.6
Intangible assets subject to amortization, net	9,119.1	70.7		9,189.8
Other assets, net (notes 2 and 4)	4,334.5	756.3	(9.6)	5,081.2
Total assets	\$ 70,084.5	\$ 2,771.0	\$ (13.6)	\$ 72,841.9

# ATTRIBUTED BALANCE SHEET INFORMATION — (Continued) December 31, 2014 (unaudited)

	Attribi	ited to:		
	Liberty Global Group	LiLAC Group	Inter-group eliminations	Consolidated Liberty Global
		in	millions	
LIABILITIES AND EQUITY				
Current liabilities:				
Accounts payable	\$ 959.7	\$ 79.3	\$ —	\$ 1,039.0
Deferred revenue and advance payments from subscribers and others	1,407.7	44.5	_	1,452.2
Current portion of debt and capital lease obligations		0.7	_	1,550.9
Accrued interest	638.6	52.0		690.6
Accrued income taxes	407.1	6.6		413.7
Accrued capital expenditures	393.5	18.9		412.4
Derivative instruments	1,004.0	39.7		1,043.7
Other accrued and current liabilities	2,405.6	186.2	(4.0)	2,587.8
Total current liabilities	8,766.4	427.9	(4.0)	9,190.3
Long-term debt and capital lease obligations (note 4)	42,544.7	2,072.8	(9.4)	44,608.1
Other long-term liabilities (note 2)	4,726.5	201.2	(0.2)	4,927.5
Total liabilities	56,037.6	2,701.9	(13.6)	58,725.9
Equity attributable to Liberty Global shareholders	14,694.3	20.2		14,714.5
Noncontrolling interests	(647.4)	48.9		(598.5)
Total equity	14,046.9	69.1		14,116.0
Total liabilities and equity	\$ 70,084.5	\$ 2,771.0	\$ (13.6)	\$ 72,841.9

### ATTRIBUTED STATEMENT OF OPERATIONS AND COMPREHENSIVE EARNINGS (LOSS) INFORMATION Year ended December 31, 2015 (unaudited)

	Attributed to:			
	Liberty Global Group	LiLAC Group	Inter-group eliminations	nsolidated erty Global
		in	millions	
Revenue	\$17,062.7	\$ 1,217.3	\$ —	\$ 18,280.0
Operating costs and expenses (note 3):				
Operating (other than depreciation and amortization) (including share-based compensation)	6,228.7	535.3	_	6,764.0
SG&A (including share-based compensation)	2,973.5	193.4	_	3,166.9
Inter-group fees and allocations	(4.3)	4.3	_	_
Depreciation and amortization	5,609.4	216.4	_	5,825.8
Impairment, restructuring and other operating items, net	154.3	19.8	_	174.1
	14,961.6	969.2		15,930.8
Operating income	2,101.1	248.1		2,349.2
Non-operating income (expense):				
Interest expense (note 4)	(2,284.1)	(157.9)	0.6	(2,441.4)
Interest and dividend income (note 4)	33.5	3.0	(0.6)	35.9
Realized and unrealized gains on derivative instruments, net	619.9	227.3	_	847.2
Foreign currency transaction losses, net	(925.8)	(223.4)		(1,149.2)
Realized and unrealized gains due to changes in fair values of certain investments, net	124.5	_	_	124.5
Losses on debt modification and extinguishment, net	(388.0)		_	(388.0)
Other expense, net	(58.0)	(4.8)	_	(62.8)
	(2,878.0)	(155.8)		(3,033.8)
Earnings (loss) before income taxes	(776.9)	92.3		(684.6)
Income tax expense (note 2)	(324.3)	(40.6)		(364.9)
Net earnings (loss)	(1,101.2)	51.7		(1,049.5)
Net earnings attributable to noncontrolling interests	(95.2)	(7.8)	_	(103.0)
Net earnings (loss) attributable to Liberty Global shareholders	\$ (1,196.4)	\$ 43.9	<u>\$</u>	\$ (1,152.5)
Net earnings (loss)	\$ (1,101.2)	\$ 51.7	\$ —	\$ (1,049.5)
Other comprehensive earnings (loss), net of taxes:				
Foreign currency translation adjustments	(762.4)	29.5	_	(732.9)
Reclassification adjustments included in net loss	1.5	_		1.5
Pension-related adjustments and other	(20.3)	1.5	_	(18.8)
Other comprehensive earnings (loss)		31.0		(750.2)
Comprehensive earnings (loss)	(1,882.4)	82.7		 (1,799.7)
Comprehensive earnings attributable to noncontrolling interests	( ) /	(7.8)		(103.5)
Comprehensive earnings (loss) attributable to Liberty Global shareholders	\$ (1,978.1)		<u>\$</u>	\$ (1,903.2)

### ATTRIBUTED STATEMENT OF OPERATIONS AND COMPREHENSIVE EARNINGS (LOSS) INFORMATION Year ended December 31, 2014 (unaudited)

	Attribu	ited to:				
	Liberty Global Group	LiLAC Group	Inter-group eliminations		solidated rty Global	
		in	millions			
Revenue	\$ 17,043.7	\$ 1,204.6	\$ —	\$ 18,2	248.3	
Operating costs and expenses (note 3):						
Operating (other than depreciation and amortization) (including share-based compensation)	6,315.2	530.7		6,8	845.9	
SG&A (including share-based compensation)	2,928.6	208.7		3,1	137.3	
Depreciation and amortization	5,283.4	216.7	_	5,5	500.1	
Impairment, restructuring and other operating items, net	516.7	20.1		4	536.8	
	15,043.9	976.2		16,0	020.1	
Operating income	1,999.8	228.4	_	2,2	228.2	
Non-operating income (expense):						
Interest expense (note 4)	(2,405.1)	(140.4)	0.8	(2,5	544.7)	
Interest and dividend income (note 4)	29.0	3.5	(0.8)		31.7	
Realized and unrealized gains on derivative instruments, net	45.1	43.7			88.8	
Foreign currency transaction losses, net	(738.6)	(97.9)		3)	336.5)	
Realized and unrealized gains due to changes in fair values of certain investments, net	205.2	_	_	2	205.2	
Losses on debt modification and extinguishment, net	(174.4)	(11.8)		(1	186.2)	
Other expense, net	(41.0)	(1.4)			(42.4)	
	(3,079.8)	(204.3)	_	(3,2	284.1)	
Earnings (loss) from continuing operations before income taxes		24.1	_	(1,0	055.9)	
Income tax benefit (expense) (note 2)		(14.4)			75.0	
Earnings (loss) from continuing operations	(990.6)	9.7		(9	980.9)	
Discontinued operation:						
Earnings from discontinued operation, net of taxes					0.8	
Gain on disposal of discontinued operation, net of taxes					332.7	
	333.5				333.5	
Net earnings (loss)	(657.1)	9.7	_	`	647.4)	
Net loss (earnings) attributable to noncontrolling interests		2.3	<u> </u>		(47.6)	
Net earnings (loss) attributable to Liberty Global shareholders	\$ (707.0)	\$ 12.0	<u>\$</u>	\$ (6	595.0)	
Net earnings (loss)	\$ (657.1)	\$ 9.7	<u> </u>	\$ (6	547.4)	
Other comprehensive loss, net of taxes:	(0(0,0)	((( 0)		((	25.0)	
Foreign currency translation adjustments		(66.0)			935.9)	
Reclassification adjustments included in net loss  Pension-related adjustments and other		_	_		124.4	
•					(71.2)	
Other comprehensive loss		$\frac{(66.0)}{(56.2)}$			882.7)	
Comprehensive loss (earnings) attributable to noncontrolling		(56.3)	_		530.1)	
interests	(49.4)	2.3			(47.1)	
shareholdersshareholders	\$ (1,523.2)	\$ (54.0)	<u>\$</u>	\$ (1,5	577.2)	

### ATTRIBUTED STATEMENT OF OPERATIONS AND COMPREHENSIVE EARNINGS (LOSS) INFORMATION Year ended December 31, 2013 (unaudited)

	Attributed to:					
	Liberty Global Group		LiLAC Group		ter-group ninations	nsolidated erty Global
			in	milli	ons	
Revenue	\$ 13,186.7	\$	1,288.8	\$	(1.3)	\$ 14,474.2
Operating costs and expenses (note 3):						
Operating (other than depreciation and amortization) (including share-based compensation)	4,825.0		611.1		(1.3)	5,434.8
SG&A (including share-based compensation)	2,374.3		225.1		_	2,599.4
Depreciation and amortization	3,934.0		342.4		_	4,276.4
Release of litigation provision	(146.0	)	_		_	(146.0)
Impairment, restructuring and other operating items, net	210.2		87.3			297.5
	11,197.5		1,265.9		(1.3)	12,462.1
Operating income	1,989.2		22.9		_	2,012.1
Non-operating income (expense):						
Interest expense (note 4)	(2,226.9	)	(81.5)		21.5	(2,286.9)
Interest and dividend income (note 4)	131.9		2.7		(21.5)	113.1
Realized and unrealized gains (losses) on derivative instruments, net	(1,035.1	)	14.7		_	(1,020.4)
Foreign currency transaction gains (losses), net	371.5		(22.2)		_	349.3
Realized and unrealized gains due to changes in fair values of certain investments, net	524.1		_		_	524.1
Losses on debt modification and extinguishment, net	(212.2	)	_			(212.2)
Other expense, net	(2.4	)	(3.2)			(5.6)
	(2,449.1	<u> </u>	(89.5)			(2,538.6)
Loss from continuing operations before income taxes	(459.9	)	(66.6)			(526.5)
Income tax benefit (expense) (note 2)	(369.1	)	13.6		_	(355.5)
Loss from continuing operations	(829.0	) —	(53.0)			(882.0)
Loss from discontinued operation, net of taxes	(23.7	)	_			(23.7)
Net loss	(852.7	)	(53.0)			(905.7)
Net loss (earnings) attributable to noncontrolling interests	(72.1	)	13.9		_	(58.2)
Net loss attributable to Liberty Global shareholders	\$ (924.8	) \$	(39.1)	\$		\$ (963.9)
Net loss	\$ (852.7	- <del></del>	(53.0)	\$		\$ (905.7)
Other comprehensive earnings (loss), net of taxes:	<del>• (002.7</del>		(00.0)			 (300.7)
Foreign currency translation adjustments	983.5		(82.7)		_	900.8
Reclassification adjustments included in net loss			(02.7)			(0.7)
Pension-related adjustments and other						11.3
Other comprehensive earnings (loss)			(82.7)			 911.4
Comprehensive earnings (loss)			(135.7)			 5.7
Comprehensive loss (earnings) attributable to noncontrolling			31.2			(41.3)
interests	(12.3	<u>′</u> —	31.4			 (71.3)
shareholders	\$ 68.9	\$	(104.5)	\$		\$ (35.6)

### ATTRIBUTED STATEMENT OF CASH FLOWS INFORMATION Year ended December 31, 2015 (unaudited)

	Attribu	ted to:		
	Liberty Global Group	LiLAC Group	Inter-group eliminations	Consolidated Liberty Global
		in	millions	
Cash flows from operating activities:				
Net earnings (loss)	\$ (1,101.2)	\$ 51.7	\$ —	\$ (1,049.5)
Adjustments to reconcile net earnings (loss) to net cash provided by operating activities:				
Share-based compensation expense	315.8	2.4		318.2
Inter-group fees and allocations	(4.3)	4.3	_	_
Depreciation and amortization	5,609.4	216.4	_	5,825.8
Impairment, restructuring and other operating items, net	154.3	19.8	_	174.1
Amortization of deferred financing costs and non-cash interest accretion	76.5	4.3		80.8
Realized and unrealized gains on derivative instruments, net	(619.9)	(227.3)	_	(847.2)
Foreign currency transaction losses, net	925.8	223.4	_	1,149.2
Realized and unrealized gains due to changes in fair values of certain investments, including impact of dividends	(121.4)	_	_	(121.4)
Losses on debt modification and extinguishment, net	388.0		_	388.0
Deferred income tax benefit	(31.5)	(18.6)	_	(50.1)
Excess tax benefits from share-based compensation	(23.0)	(3.7)	_	(26.7)
Changes in operating assets and liabilities, net of the effects of acquisitions and dispositions:				
Receivables and other operating assets	532.7	46.6	(12.8)	566.5
Payables and accruals	(701.9)	(12.8)	12.8	(701.9)
Net cash provided by operating activities	5,399.3	306.5		5,705.8
Cash flows from investing activities:				
Capital expenditures	(2,272.3)	(227.2)	_	(2,499.5)
Investments in and loans to affiliates and others	(998.6)	(1.0)		(999.6)
Cash paid in connection with acquisitions, net of cash acquired	(113.3)	(272.5)		(385.8)
Inter-group receipts (payments), net	(98.8)	8.6	90.2	
Other investing activities, net	54.0	1.5	_	55.5
Net cash used by investing activities	\$ (3,429.0)	\$ (490.6)	\$ 90.2	\$ (3,829.4)

### ATTRIBUTED STATEMENT OF CASH FLOWS INFORMATION — (Continued) Year ended December 31, 2015 (unaudited)

	Attribu	ted to:		
	Liberty Global Group	LiLAC Group	Inter-group eliminations	Consolidated Liberty Global
		in	millions	
Cash flows from financing activities:				
Borrowings of debt	\$ 14,969.3	\$ 261.1	\$ —	\$ 15,230.4
Repayments and repurchases of debt and capital lease obligations	(13,880.6)	(0.8)		(13,881.4)
Repurchase of Liberty Global ordinary shares	(2,320.5)	_	_	(2,320.5)
Payment of financing costs, debt premiums and exchange offer consideration	(418.1)	(5.2)	_	(423.3)
Net cash paid related to derivative instruments	(301.2)	_	_	(301.2)
Purchase of additional shares of subsidiaries	(142.4)		_	(142.4)
Net cash paid associated with call option contracts on Liberty Global ordinary shares	(78.3)	_	_	(78.3)
Change in cash collateral	(56.1)		_	(56.1)
Distributions by subsidiaries to noncontrolling interest owners	(11.3)			(11.3)
Inter-group receipts (payments), net	(8.5)	98.7	(90.2)	_
Other financing activities, net	(63.6)	9.9		(53.7)
Net cash provided (used) by financing activities	(2,311.3)	363.7	(90.2)	(2,037.8)
Effect of exchange rate changes on cash	(2.8)	(12.2)		(15.0)
Net increase (decrease) in cash and cash equivalents	(343.8)	167.4	_	(176.4)
Cash and cash equivalents:	1.051.4	107.1		1 150 5
Beginning of year		107.1		1,158.5
End of year	\$ 707.6	\$ 274.5	<u>\$</u>	\$ 982.1
Cash paid for interest	\$ 2,024.0	\$ 146.4	<u>\$</u>	\$ 2,170.4
Net cash paid for taxes	\$ 213.8	\$ 22.5	<u>\$</u>	\$ 236.3

### ATTRIBUTED STATEMENT OF CASH FLOWS INFORMATION Year ended December 31, 2014 (unaudited)

Libard   L		Attribu	ited to:		
Net earnings (loss)   S		Globaľ	Group	eliminations	
Net earnings (loss)   S (657.1)   S 9.7   S   S (647.4)			in	millions	
Earnings from discontinued operation		ф. (C5 <b>5</b> 1)	Φ 0.7	Φ.	<b>.</b> (64 <b>.7</b> .4)
Earnings (loss) from continuing operations		, ,	\$ 9.7	\$ —	` ′
Adjustments to reconcile earnings (loss) from continuing operations to net eash provided by operating activities:  Share-based compensation expense	•				
Share-based compensation expense   245.6   11.6   — 257.2		(990.6)	9.7	_	(980.9)
Depreciation and amortization	operations to net cash provided by operating activities:				
Impairment, restructuring and other operating items, net	Share-based compensation expense	245.6	11.6		257.2
Amortization of deferred financing costs and non-cash interest accretion         80.9         3.4         —         84.3           Realized and unrealized gains on derivative instruments, net         (45.1)         (43.7)         —         (88.8)           Foreign currency transaction losses, net         738.6         97.9         —         836.5           Realized and unrealized gains due to changes in fair values of certain investments, including impact of dividends         (203.7)         —         —         (203.7)           Losses on debt modification and extinguishment, net         174.4         11.8         —         186.2           Deferred income tax expense (benefit)         (378.8)         28.2         —         (350.6)           Excess tax benefits from share-based compensation         (6.9)         (0.1)         —         (7.0)           Changes in operating assets and liabilities, net of the effects of acquisitions and dispositions:         807.9         (45.2)         (2.2)         860.5           Payables and accruals         (998.6)         (21.4)         2.2         (1,017.8)           Net cash used by operating activities of discontinued operation         (9.6)         —         —         (9.6)           Net cash provided by operating activities:         (2,461.3)         (223.1)         —         (2,684.4)	Depreciation and amortization	5,283.4	216.7	_	5,500.1
Interest accretion	Impairment, restructuring and other operating items, net	516.7	20.1	_	536.8
Net	interest accretion.	80.9	3.4		84.3
Foreign currency transaction losses, net	,	(45.1)	(43.7)		(888)
Realized and unrealized gains due to changes in fair values of certain investments, including impact of dividends       (203.7)       —       —       (203.7)         Losses on debt modification and extinguishment, net       174.4       11.8       —       186.2         Deferred income tax expense (benefit)       (378.8)       28.2       —       (350.6)         Excess tax benefits from share-based compensation       (6.9)       (0.1)       —       (7.0)         Changes in operating assets and liabilities, net of the effects of acquisitions and dispositions:       907.9       (45.2)       (2.2)       860.5         Payables and other operating assets       997.9       (45.2)       (2.2)       860.5         Payables and accruals       (998.6)       (21.4)       2.2       (1,017.8)         Net cash used by operating activities of discontinued operation       (9.6)       —       —       (9.6)         Net cash provided by operating activities:       (2,461.3)       (223.1)       —       (2,684.4)         Investments in and loans to affiliates and others       (1,015.6)       (1.0)       —       (1,016.6)         Cash paid in connection with acquisitions, net of cash acquired       (73.3)       —       —       (73.3)         Proceeds received upon disposition of discontinued operation, net of disposal costs <t< td=""><td></td><td></td><td>` ′</td><td></td><td>· · · · · ·</td></t<>			` ′		· · · · · ·
Certain investments, including impact of dividends	,		71.7		830.3
Deferred income tax expense (benefit) (378.8) 28.2 — (350.6) Excess tax benefits from share-based compensation (6.9) (0.1) — (7.0)  Changes in operating assets and liabilities, net of the effects of acquisitions and dispositions:  Receivables and other operating assets (997.9) (45.2) (2.2) 860.5  Payables and accruals (998.6) (21.4) 2.2 (1,017.8)  Net cash used by operating activities of discontinued operation (9.6) — — (9.6)  Net cash provided by operating activities (5,314.2) 289.0 — 5,603.2  Cash flows from investing activities:  Capital expenditures (2,461.3) (223.1) — (2,684.4)  Investments in and loans to affiliates and others (1,015.6) (1.0) — (1,016.6)  Cash paid in connection with acquisitions, net of cash acquired (73.3) — — (73.3)  Proceeds received upon disposition of discontinued operation, net of disposal costs (441.8) — (441.8) — (441.8)  Other investing activities, net (14.8) (8.1) 9.1 (13.8)  Net cash used by investing activities of discontinued operation,	certain investments, including impact of dividends	(203.7)		_	(203.7)
Excess tax benefits from share-based compensation	Losses on debt modification and extinguishment, net	174.4	11.8	_	186.2
Changes in operating assets and liabilities, net of the effects of acquisitions and dispositions:  Receivables and other operating assets	Deferred income tax expense (benefit)	(378.8)	28.2	_	(350.6)
of acquisitions and dispositions:  Receivables and other operating assets	Excess tax benefits from share-based compensation	(6.9)	(0.1)	_	(7.0)
Payables and accruals	of acquisitions and dispositions:				
Net cash used by operating activities of discontinued operation			(45.2)	(2.2)	860.5
Net cash provided by operating activities 5,314.2 289.0 — 5,603.2  Cash flows from investing activities:  Capital expenditures	Payables and accruals	(998.6)	(21.4)	2.2	(1,017.8)
Cash flows from investing activities:  Capital expenditures	Net cash used by operating activities of discontinued operation	(9.6)			(9.6)
Capital expenditures	Net cash provided by operating activities	5,314.2	289.0		5,603.2
Investments in and loans to affiliates and others	Cash flows from investing activities:				
Cash paid in connection with acquisitions, net of cash acquired (73.3) — — — (73.3)  Proceeds received upon disposition of discontinued operation, net of disposal costs	Capital expenditures	(2,461.3)	(223.1)	_	(2,684.4)
Proceeds received upon disposition of discontinued operation, net of disposal costs	Investments in and loans to affiliates and others	(1,015.6)	(1.0)		(1,016.6)
of disposal costs	Cash paid in connection with acquisitions, net of cash acquired	(73.3)	_		(73.3)
Other investing activities, net		988.5		_	988.5
Net cash used by investing activities of discontinued operation,	Inter-group receipts, net	441.8	_	(441.8)	
	Other investing activities, net	(14.8)	(8.1)	9.1	(13.8)
morating accommended cash	Net cash used by investing activities of discontinued operation, including deconsolidated cash	(3.8)	_	_	(3.8)
Net cash used by investing activities	Net cash used by investing activities	\$ (2,138.5)	\$ (232.2)	\$ (432.7)	\$ (2,803.4)

### ATTRIBUTED STATEMENT OF CASH FLOWS INFORMATION — (Continued) Year ended December 31, 2014 (unaudited)

	Attributed to:					
	Liberty Global Group	LiLAC Group	- Inter-group eliminations			onsolidated perty Global
		iı	mill	ions		
Cash flows from financing activities:						
Borrowings of debt	\$ 9,527.4	\$ 45.0	\$	_	\$	9,572.4
Repayments and repurchases of debt and capital lease obligations	(11,190.5)	(125.6	)			(11,316.1)
Repurchase of Liberty Global ordinary shares	(1,584.9)					(1,584.9)
Payment of financing costs, debt premiums and exchange offer consideration	(336.1)	(43.7	)			(379.8)
Net cash paid related to derivative instruments	(183.6)	(37.4	)	_		(221.0)
Purchase of additional shares of subsidiaries	(260.7)			_		(260.7)
Net cash paid associated with call option contracts on Liberty Global ordinary shares	(41.7)			_		(41.7)
Change in cash collateral	(63.1)	4.4		_		(58.7)
Distributions by subsidiaries to noncontrolling interest owners	(12.1)			_		(12.1)
Inter-group receipts (payments), net	(472.1)	39.4		432.7		
Other financing activities, net	42.6	(0.1	)			42.5
Net cash used by financing activities of discontinued operation	(1.2)					(1.2)
Net cash used by financing activities	(4,576.0)	(118.0		432.7		(4,261.3)
Effect of exchange rate changes on cash	(75.2)	(6.7	<u> </u>			(81.9)
Net decrease in cash and cash equivalents:						
Continuing operations	(1,460.9)	`	)	_		(1,528.8)
Discontinued operation						(14.6)
Net decrease in cash and cash equivalents	(1,475.5)	(67.9	)	_		(1,543.4)
Cash and cash equivalents:						
Beginning of year		175.0				2,701.9
End of year	\$ 1,051.4	\$ 107.1	\$		\$	1,158.5
Cash paid for interest – continuing operations	\$ 2,289.8	\$ 90.1	\$	(3.2)	\$	2,376.7
Net cash paid for taxes:						
Continuing operations	\$ 59.9	\$ 37.4	\$	_	\$	97.3
Discontinued operation					_	2.2
Total	\$ 62.1	\$ 37.4	\$		\$	99.5

### ATTRIBUTED STATEMENT OF CASH FLOWS INFORMATION Year ended December 31, 2013 (unaudited)

Part   Part			Attributed to:					
Net loss		(	Globaľ					
Net loss					in	millions		
Loss from discontinued operation								
Loss from continuing operations			` ′	\$	(53.0)	\$		\$ ` /
Adjustments to reconcile loss from continuing operations to net cash provided by operating activities:  Share-based compensation expense 294.3 6.4 — 300.7  Depreciation and amortization 3,934.0 342.4 — 4,276.4  Release of litigation provision	•						_	
cash provided by operating activities:         294.3         6.4         —         300.7           Depreciation and amortization         3,934.0         342.4         —         4,276.4           Release of litigation provision         (146.0)         —         —         (146.0)           Impairment, restructuring and other operating items, net         210.2         87.3         —         297.5           Amortization of deferred financing costs and non-cash interest accretion         75.9         2.1         —         78.0           Realized and unrealized losses (gains) on derivative instruments, net.         (371.5)         22.2         —         (349.3)           Realized and unrealized gains due to changes in fair values of certain investments, including impact of dividends.         (523.1)         —         —         (523.1)           Losses on debt modification and extinguishment, net.         212.2         —         —         212.2           Deferred income tax expense (benefit)         67.9         (49.3)         —         18.6           Excess tax benefits from share-based compensation         (40.0)         (1.0)         —         (41.0)           Changes in operating assets and liabilities, net of the effects of acquisitions and dispositions:         815.2         43.4         8.1         866.7           Payab			(829.0)		(53.0)		—	(882.0)
Depreciation and amortization								
Release of litigation provision	Share-based compensation expense		294.3		6.4		—	300.7
Impairment, restructuring and other operating items, net	Depreciation and amortization		3,934.0		342.4		—	4,276.4
Amortization of deferred financing costs and non-cash interest accretion	Release of litigation provision		(146.0)					(146.0)
Accretion	Impairment, restructuring and other operating items, net		210.2		87.3			297.5
instruments, net			75.9		2.1		_	78.0
Foreign currency transaction losses (gains), net	Realized and unrealized losses (gains) on derivative		1 035 1		(14.7)		_	1 020 4
Realized and unrealized gains due to changes in fair values of certain investments, including impact of dividends	· · · · · · · · · · · · · · · · · · ·				, ,			· ·
certain investments, including impact of dividends         (523.1)         —         —         (523.1)           Losses on debt modification and extinguishment, net         212.2         —         —         212.2           Deferred income tax expense (benefit)			(3/1.3)		22.2			(317.5)
Deferred income tax expense (benefit)			(523.1)		_			(523.1)
Excess tax benefits from share-based compensation	Losses on debt modification and extinguishment, net		212.2				—	212.2
Changes in operating assets and liabilities, net of the effects of acquisitions and dispositions:  Receivables and other operating assets 815.2 43.4 8.1 866.7  Payables and accruals (1,106.4) (93.6) (8.1) (1,208.1)  Net cash provided by operating activities of discontinued operation 10.3 — 10.3  Net cash provided by operating activities 10.3 — 10.3  Net cash provided by operating activities 10.3 — 10.3  Cash flows from investing activities:  Capital expenditures (2,219.4) (262.1) — (2,481.5)  Investments in and loans to affiliates and others (1,342.6) (3.0) (4.7) (1,350.3)  Cash paid in connection with acquisitions, net of cash acquired (4,073.4) — (4,073.4)  Other investing activities, net (46.1) 1.2 — (44.9)  Net cash used by investing activities of discontinued operation, including deconsolidated cash (14.9) — — (14.9)	Deferred income tax expense (benefit)		67.9		(49.3)		—	18.6
acquisitions and dispositions:  Receivables and other operating assets 815.2 43.4 8.1 866.7  Payables and accruals (1,106.4) (93.6) (8.1) (1,208.1)  Net cash provided by operating activities of discontinued operation 10.3 — 10.3  Net cash provided by operating activities 10.3 — 10.3  Net cash provided by operating activities 10.3 — 10.3  Cash flows from investing activities: (2,219.4) (262.1) — (2,481.5)  Investments in and loans to affiliates and others (1,342.6) (3.0) (4.7) (1,350.3)  Cash paid in connection with acquisitions, net of cash acquired (4,073.4) — (4,073.4)  Other investing activities, net (46.1) 1.2 — (44.9)  Net cash used by investing activities of discontinued operation, including deconsolidated cash (14.9) — — (14.9)	Excess tax benefits from share-based compensation		(40.0)		(1.0)		—	(41.0)
Payables and accruals	Changes in operating assets and liabilities, net of the effects of acquisitions and dispositions:							
Net cash provided by operating activities of discontinued operation	Receivables and other operating assets		815.2		43.4	:	8.1	866.7
operation	Payables and accruals	. (	(1,106.4)		(93.6)	(3	8.1)	(1,208.1)
Cash flows from investing activities:  Capital expenditures			10.3		_		_	10.3
Capital expenditures	Net cash provided by operating activities		3,639.1		292.2		_	3,931.3
Investments in and loans to affiliates and others	Cash flows from investing activities:							
Cash paid in connection with acquisitions, net of cash acquired (4,073.4) — — — (4,073.4)  Other investing activities, net	Capital expenditures	. (	(2,219.4)		(262.1)			(2,481.5)
Other investing activities, net	Investments in and loans to affiliates and others	. (	(1,342.6)		(3.0)	(4	4.7)	(1,350.3)
Net cash used by investing activities of discontinued operation, including deconsolidated cash	Cash paid in connection with acquisitions, net of cash acquired	. (	(4,073.4)					(4,073.4)
including deconsolidated cash	Other investing activities, net		(46.1)		1.2			(44.9)
	Net cash used by investing activities of discontinued operation, including deconsolidated cash		(14.9)		_			, ,
	Net cash used by investing activities	\$ (	(7,696.4)	\$	(263.9)	\$ (4	4.7)	\$ (7,965.0)

### ATTRIBUTED STATEMENT OF CASH FLOWS INFORMATION — (Continued) Year ended December 31, 2013 (unaudited)

	Attribu	ited to:		
	Liberty Global Group	LiLAC Group	Inter-group eliminations	Consolidated Liberty Global
Cash flows from financing activities:		in	millions	
Cash flows from financing activities:	¢ 0.630.5	ф <b>41</b> 0	¢.	e 0.670.2
Borrowings of debt		\$ 41.8	\$ —	\$ 9,670.3
Repayments and repurchases of debt and capital lease obligations	(8,309.2)	(9.4)	_	(8,318.6)
Repurchase of Liberty Global ordinary shares	(1,157.2)	_	_	(1,157.2)
Payment of financing costs, debt premiums and exchange offer consideration	(388.5)	(1.1)		(389.6)
Net cash received related to derivative instruments	524.5		_	524.5
Purchase of additional shares of subsidiaries	(461.3)	_	_	(461.3)
Net cash received associated with call option contracts on Liberty Global ordinary shares	59.6	_	_	59.6
Change in cash collateral	3,594.4	(0.6)		3,593.8
Distributions by subsidiaries to noncontrolling interest owners	(509.2)	(31.8)	_	(541.0)
Decrease in restricted cash related to the Telenet Tender	1,539.7		_	1,539.7
Inter-group receipts (payments), net	(84.0)	79.3	4.7	
Other financing activities, net	80.1	23.0	_	103.1
Net cash used by financing activities of discontinued operation	(7.4)	_	_	(7.4)
Net cash provided by financing activities	4,510.0	101.2	4.7	4,615.9
Effect of exchange rate changes on cash – continuing operations	86.6	(1.2)		85.4
Net increase (decrease) in cash and cash equivalents:				
Continuing operations	551.3	128.3	_	679.6
Discontinued operation	(12.0)	_	_	(12.0)
Net increase in cash and cash equivalents	539.3	128.3	_	667.6
Cash and cash equivalents:				
Beginning of year	1,992.2	46.7		2,038.9
End of year	2,531.5	175.0	_	2,706.5
Less cash and cash equivalents of discontinued operation at end of year	(4.6)			(4.6)
Cash and cash equivalents of continuing operations at end of year	\$ 2,526.9	\$ 175.0	<u> </u>	\$ 2,701.9
Cash paid for interest – continuing operations	\$ 2,091.9	\$ 68.5	\$ (11.6)	\$ 2,148.8
Net cash paid for taxes:				
Continuing operations	\$ 57.1	\$ 40.4	\$ —	\$ 97.5
Discontinued operation	11.7			11.7
Total	\$ 68.8	\$ 40.4	\$	\$ 109.2

Notes to Attributed Financial Information December 31, 2015, 2014 and 2013 (unaudited)

### (1) Attributed Financial Information

The terms "LiLAC Group" and "Liberty Global Group" do not represent separate legal entities, rather they represent those businesses, assets and liabilities that have been attributed to each group. The LiLAC Group comprises our businesses, assets and liabilities in Latin America and the Caribbean and has attributed to it (i) VTR Finance and its subsidiaries, which include VTR, (ii) Lila Chile Holding B.V. (Lila Chile Holding), (iii) LiLAC Holdings and its subsidiaries, which include Liberty Puerto Rico, (iv) LGE Coral Holdco Limited and its subsidiary, which were formed in anticipation of the acquisition of CWC, and (v) prior to July 1, 2015, the LiLAC Corporate Costs. Effective July 1, 2015, LiLAC Corporate Costs were transferred to LiLAC Holdings. The Liberty Global Group comprises our businesses, assets and liabilities not attributed to the LiLAC Group, including Virgin Media, Ziggo Group Holding, Unitymedia, Telenet, UPC Holding, our corporate entities (excluding the LiLAC Corporate Costs) and certain other less significant entities. Accordingly, the accompanying attributed financial information for the Liberty Global Group and the LiLAC Group includes the assets, liabilities, revenue, expenses and cash flows of the respective entities within each group. Any business that we may acquire in the future that we do not attribute to the LiLAC Group will be attributed to the Liberty Global Group.

Our board of directors is vested with discretion to reattribute businesses, assets and liabilities that are attributed to either the Liberty Global Group or the LiLAC Group to the other group, without the approval of any of our shareholders, and may use the liquidity of one group to fund the liquidity and capital resource requirements of the other group. Accordingly, shareholders may have difficulty evaluating the future prospects and liquidity and capital resources of each group.

### (2) Income Taxes

We generally have accounted for income taxes for the Liberty Global Group and the LiLAC Group in the accompanying attributed financial information on a separate return basis, as adjusted to reflect the consolidated view of the tax asset, liability, benefit or expense (tax attribute) of each group. Accordingly, except as otherwise noted below, any tax attribute associated with an entity attributed to the Liberty Global Group has been allocated to the Liberty Global Group and any tax attribute associated with an entity attributed to the LiLAC Group has been allocated to the LiLAC Group.

Liberty Global owns consolidated interests in a number of entities that are included in combined or consolidated tax returns, including tax returns in the Netherlands (the **Dutch Fiscal Unity**), the U.K. (the **U.K. Tax Group**) and the U.S (the **U.S. Tax Group**). Different members of the Liberty Global Group file combined tax returns for the Dutch Fiscal Unity, U.K. tax returns, where sharing of certain tax attributes is permitted, and consolidated tax returns for the U.S. Tax Group. Certain entities included in the Dutch Fiscal Unity, the U.K. Tax Group and the U.S. Tax Group are attributed to the LiLAC Group. As a result, we record inter-group tax allocations to recognize changes in the tax attributes of certain members of the LiLAC Group that are included in the Dutch Fiscal Unity, the U.K. Tax Group or the U.S. Tax Group. Prior to July 1, 2015, the inter-group tax allocations reflected in the attributed financial information were not cash settled and were not the subject of tax sharing agreements. Accordingly, intergroup tax allocations prior to July 1, 2015 are reflected in the attributed financial information as adjustments of equity. Following the adoption of the tax sharing policy described below, certain inter-group tax allocations are expected to be cash settled.

Effective July 1, 2015 (the date we distributed the LiLAC Shares), the allocation of tax attributes between the Liberty Global Group and the LiLAC Group is based on a tax sharing policy. This tax sharing policy, which may be changed in future periods at the discretion of the board of directors of Liberty Global, generally results in the allocation of Liberty Global's tax attributes to the Liberty Global Group and the LiLAC Group based on the tax attributes of the legal entities attributed to each of the groups. Nevertheless, to the extent that Liberty Global management concludes that the actions or results of one group give rise to changes in the tax attributes of the other group, the change in those tax attributes are generally allocated to the group whose actions or results gave rise to such changes. Similarly, in cases where legal entities in one group join in a common tax filing with members of the other group, changes in the tax attributes of the group that includes the filing entity that are the result of the actions or financial results of one or more members of the other group are allocated to the group that does not include the filing entity. In addition, the allocation of any taxes and losses resulting from the ultimate tax treatment of Liberty Global tax attributes related to the distribution of the LiLAC Shares are allocated in proportion to each group's respective number of "liquidation units." Liquidation units were allocated to each Liberty Global Share and each LiLAC Share, respectively, in proportion to the relative market value of a Class C Liberty Global Share and a Class C LiLAC Share, respectively, based on their respective volume-weighted average price over the 20 trading-day period commencing shortly after the commencement of ordinary-course (regular-way) trading of the LiLAC Shares. Pursuant to the terms of our articles of association, the liquidation units for each Liberty Global Share and each LiLAC Share are 1 and 0.94893, respectively. For periods beginning on and after July 1, 2015, we will record non-interest bearing inter-group payables and receivables in connection with the allocation of tax attributes. These inter-group payables and receivables

### Notes to Attributed Financial Information — (Continued) December 31, 2015, 2014 and 2013 (unaudited)

are expected to be cash settled annually within 90 days following the filing of the relevant tax return to the extent that amounts are due to or from the tax authority for the taxable year covered by the applicable return. In the case of allocated tax assets, intergroup payables and receivables will only be recorded to the extent that the realization by the ultimate tax-paying entity is considered to be more-likely-than-not. At December 31, 2015, we do not believe that it is more-likely-than-not that we will realize the tax assets of the Dutch Fiscal Unity.

### Liberty Global Group

Income tax benefit (expense) consists of:

	Lib				
	Current		eferred		Total
		in	millions		
Year ended December 31, 2015:					
Continuing operations:					
U.K.	\$ (0.9)	\$	(209.0)	\$	(209.9)
The Netherlands	2.5		159.0		161.5
Belgium	(125.4)		11.1		(114.3)
Switzerland	(63.2)		(14.7)		(77.9)
Germany	(66.7)		24.3		(42.4)
U.S. (a) (b)	(79.4)		54.1		(25.3)
Other	 (22.7)		6.7		(16.0)
Total	\$ (355.8)	\$	31.5	\$	(324.3)
Year ended December 31, 2014:					
Continuing operations:					
U.S. (a) (b)	\$ (19.2)	\$	133.7	\$	114.5
U.K	(2.1)		113.4		111.3
Belgium	(138.7)		31.7		(107.0)
Switzerland	(76.8)		3.1		(73.7)
The Netherlands	11.1		42.5		53.6
Germany	(22.6)		37.0		14.4
Other	(41.1)		17.4		(23.7)
Total — continuing operations	\$ (289.4)	\$	378.8	\$	89.4
Discontinued operations	\$	\$	(0.1)	\$	(0.1)
Year ended December 31, 2013:					
Continuing operations:					
U.K	\$ (2.4)	\$	(245.2)	\$	(247.6)
Belgium	(97.1)		(16.2)		(113.3)
The Netherlands	0.5		97.3		97.8
Switzerland	(53.6)		(4.4)		(58.0)
Germany	(13.2)		(38.1)		(51.3)
U.S. (a) (b)	(104.3)		111.6		7.3
Other	(31.1)		27.1		(4.0)
Total — continuing operations	\$ (301.2)	\$	(67.9)	\$	(369.1)
Discontinued operations	\$ (20.5)	\$	(2.2)	\$	(22.7)

### Notes to Attributed Financial Information — (Continued) December 31, 2015, 2014 and 2013 (unaudited)

- (a) Includes federal and state income taxes. Our U.S. state income taxes were not material during any of the years presented.
- (b) The amounts include (i) inter-group current tax expense of the U.S. Tax Group of \$2.1 million during the six months ended December 31, 2015 and (ii) inter-group deferred tax expense of the U.S. Tax Group of \$1.5 million during the six months ended June 30, 2015 and \$6.1 million and \$5.2 million during 2014 and 2013, respectively. The U.S. Tax Group expenses were recorded as an adjustment of equity through June 30, 2015 and as a current payable at December 31, 2015.

Income tax benefit (expense) attributable to our loss from continuing operations before income taxes differs from the amounts computed using the applicable income tax rate as a result of the following factors:

	Liberty Global Group							
	Year ended December 31,							
		2015		2014		2013		
			in r	nillions				
Computed "expected" tax benefit (a)	\$	155.4	\$	226.8	\$	105.8		
Change in valuation allowances (b):								
Decrease		(484.1)		(342.1)		(101.8)		
Increase		(2.6)		11.9		28.0		
Enacted tax law and rate changes (c)		(282.0)		2.1		(370.4)		
Tax effect of intercompany financing		154.9		166.9		82.7		
International rate differences (b) (d):								
Increase		194.4		264.5		147.0		
Decrease		(45.5)		(26.6)		(47.6)		
Basis and other differences in the treatment of items associated with investments in subsidiaries and affiliates (b):								
Decrease		(90.8)		(164.6)		(285.1)		
Increase		0.9		32.6		274.2		
Non-deductible or non-taxable interest and other expenses (b):								
Decrease		(100.7)		(236.4)		(132.7)		
Increase		48.1		58.0		85.2		
Non-deductible or non-taxable foreign currency exchange results (b):								
Increase		53.2		71.9		0.5		
Decrease		(4.0)		(16.3)		(56.1)		
Recognition of previously unrecognized tax benefits		44.4		28.7		_		
Tax benefit associated with technology innovation		21.0		_		_		
Change in subsidiary tax attributes due to a deemed change in control				_		(88.0)		
Other, net		13.1		12.0		(10.8)		
Total income tax benefit (expense)	\$	(324.3)	\$	89.4	\$	(369.1)		
					_			

<sup>(</sup>a) The statutory or "expected" tax rates are the U.K. rates of 20.0%, 21.0% and 23.0% for 2015, 2014 and 2013, respectively.

<sup>(</sup>b) Country jurisdictions giving rise to increases are grouped together and shown separately from country jurisdictions giving rise to decreases.

<sup>(</sup>c) In November 2015, it was announced that the U.K. corporate income tax rate will change from the current rate of 20.0% to 19.0% in April 2017 and 18.0% in April 2020. The impact of these rate changes on our deferred tax balances was recorded in the fourth quarter of 2015 when the relevant legislation was enacted. In April 2014, the U.K. corporate income tax rate

### Notes to Attributed Financial Information — (Continued) December 31, 2015, 2014 and 2013 (unaudited)

decreased from 23.0% to 21.0%. Substantially all of the impact of the April 2014 rate change on our deferred tax balances was recorded in the third quarter of 2013 when the relevant legislation was enacted.

(d) Amounts reflect adjustments (either an increase or a decrease) to "expected" tax benefit for statutory rates in jurisdictions in which we operate outside of the U.K.

The current and non-current components of our deferred tax assets are as follows:

	Liberty Global Group December 31.				
				2014	
		ıs			
Current deferred tax assets	\$	_	\$	275.6	
Non-current deferred tax assets (b)		2,262.5		2,516.7	
Current deferred tax liabilities		_		(0.6)	
Non-current deferred tax liabilities (b)		(1,569.6)		(2,209.3)	
Net deferred tax asset	\$	692.9	\$	582.4	

<sup>(</sup>a) In accordance with ASU 2015-17, all of our deferred tax balances are reflected as noncurrent in our December 31, 2015 balance sheet. Our December 31, 2014 deferred tax balances have not been retroactively revised.

(b) Our non-current deferred tax assets and liabilities are included in other assets, net, and other long-term liabilities, respectively, in our consolidated balance sheets.

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities are presented below:

	Liberty Glo	bal	Group
	Decem	ber	31,
	2015		2014
	in mi	llion	ıs
Deferred tax assets:			
Net operating loss and other carryforwards	\$ 5,823.4	\$	6,580.5
Property and equipment, net	2,550.9		2,931.0
Debt	1,580.0		1,177.4
Derivative instruments	173.1		345.9
Intangible assets	108.9		143.8
Other future deductible amounts	228.7		208.7
Deferred tax assets	10,465.0		11,387.3
Valuation allowance	(6,325.5)		(6,611.9)
Deferred tax assets, net of valuation allowance	4,139.5		4,775.4
Deferred tax liabilities:			
Intangible assets	(1,826.5)		(2,338.2)
Property and equipment, net	(1,053.3)		(1,362.9)
Derivative instruments	(279.9)		(142.7)
Investments	(149.7)		(193.4)
Other future taxable amounts	(137.2)		(155.8)
Deferred tax liabilities	(3,446.6)		(4,193.0)
Net deferred tax asset	\$ 692.9	\$	582.4

### Notes to Attributed Financial Information — (Continued) December 31, 2015, 2014 and 2013 (unaudited)

The significant components of our tax loss carryforwards and related tax assets at December 31, 2015 are as follows:

Country	ca	Tax loss rryforward		Related ax asset	Expiration date
		in mi	illions	8	
U.K.:					
Amount attributable to capital losses	\$	17,822.6	\$	3,208.0	Indefinite
Amount attributable to net operating losses		1,528.8		275.2	Indefinite
The Netherlands		3,465.0		866.3	2016-2024
Germany		2,002.2		321.8	Indefinite
U.S		1,323.2		329.4	2019-2033
Luxembourg		1,052.0		307.4	Indefinite
Belgium		586.4		199.3	Indefinite
France		522.7		180.0	Indefinite
Ireland		558.5		69.8	Indefinite
Hungary		230.9		43.9	2020-2025
Other		129.4		22.3	Various
Total	\$	29,221.7	\$	5,823.4	

### LiLAC Group

Income tax benefit (expense) consists of:

			LiLA	AC Group	
	Cı	urrent	D	eferred	Total
			in	millions	
Year ended December 31, 2015:					
U.S. (a)	\$	(1.8)	\$	4.6	\$ 2.8
Chile		(57.4)		13.5	(43.9)
U.K				0.5	0.5
Total	\$	(59.2)	\$	18.6	\$ (40.6)
Year ended December 31, 2014:					
Continuing operations:					
U.S. (a)	\$	(3.3)	\$	(4.1)	\$ (7.4)
Chile		17.1		(24.1)	(7.0)
Total — continuing operations	\$	13.8	\$	(28.2)	\$ (14.4)
Year ended December 31, 2013:					
Continuing operations:					
U.S. (a)	\$	(1.7)	\$	(6.7)	\$ (8.4)
Chile		(34.0)		56.0	22.0
Total — continuing operations	\$	(35.7)	\$	49.3	\$ 13.6

<sup>(</sup>a) The amounts include (i) inter-group current tax benefit of the U.S. Tax Group of \$2.1 million during the six months ended December 31, 2015 and (ii) inter-group deferred tax benefit of the U.S. Tax Group of \$1.5 million during the six months ended June 30, 2015 and \$6.1 million and \$5.2 million during 2014 and 2013, respectively. The U.S. Tax Group benefits were recorded as an adjustment of equity through June 30, 2015 and as a current receivable at December 31, 2015.

### Notes to Attributed Financial Information — (Continued) December 31, 2015, 2014 and 2013 (unaudited)

Income tax benefit (expense) attributable to our earnings (loss) from continuing operations before income taxes differs from the amounts computed using the applicable income tax rate as a result of the following:

	LiLAC Group							
	Year	Year ended December 31,						
	2015	2014	2013					
		in millions						
Computed "expected" tax benefit (expense) (a)	\$ (18.5)	\$ (5.1)	\$ 15.3					
Change in valuation allowances (b):								
Decrease	(24.2)	(31.0)	(10.8)					
Increase	9.4		3.7					
Non-deductible or non-taxable interest and other expenses	(5.9)	(0.1)	(0.8)					
Basis and other differences in the treatment of items associated with investments in subsidiaries and affiliates (b):								
Decrease	(6.1)	(3.4)	(2.9)					
Increase	2.4	_	9.8					
Enacted tax law and rate changes (c)	1.5	21.8	(7.4)					
International rate differences (b) (d):								
Decrease	(7.2)	(1.0)	(3.2)					
Increase	6.4	1.9	1.2					
Impact of price level adjustments for tax purposes	0.3	1.5	5.5					
Other, net	1.3	1.0	3.2					
Total income tax benefit (expense)	\$ (40.6)	\$ (14.4)	\$ 13.6					

<sup>(</sup>a) The statutory or "expected" tax rates are the U.K. rates of 20.0%, 21.0% and 23.0% for 2015, 2014 and 2013, respectively. In November 2015, it was announced that the U.K. corporate income tax rate will change from the current rate of 20.0% to 19.0% in April 2017 and 18.0% in April 2020.

(d) Amounts reflect adjustments (either an increase or a decrease) to "expected" tax benefit for statutory rates in jurisdictions in which we operate outside of the U.K.

The current and non-current components of our deferred tax liabilities are as follows:

		LiLAC	Gro	up		
		Decem	ber 3	81,		
	2	2015 (a) 2014				
		in mi	S			
Current deferred tax assets	\$	_	\$	14.7		
Non-current deferred tax assets (b)		80.4		70.3		
Non-current deferred tax liabilities (b)		(216.1)		(160.1)		
Net deferred tax liability	\$	(135.7)	\$	(75.1)		

<sup>(</sup>a) In accordance with ASU 2015-17, all of our deferred tax balances are reflected as noncurrent in our December 31, 2015 balance sheet. Our December 31, 2014 deferred tax balances have not been retroactively revised.

<sup>(</sup>b) Country jurisdictions giving rise to increases are grouped together and shown separately from country jurisdictions giving rise to decreases.

<sup>(</sup>c) The 2014 amount represents the impact of income tax rate changes in Chile, as further described below.

### Notes to Attributed Financial Information — (Continued) December 31, 2015, 2014 and 2013 (unaudited)

(b) Our non-current deferred tax assets and liabilities are included in other assets, net, and other long-term liabilities, respectively, in our consolidated balance sheets.

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities are presented below:

	LiLAC Group December 31, 2015 2014			
	Decem	ber 3	1,	
	2015		2014	
	in mi	llions	3	
Deferred tax assets:				
Net operating loss and other carryforwards	\$ 49.8	\$	57.4	
Property and equipment, net	32.2		39.7	
Debt	31.7		11.6	
Other future deductible amounts	47.3		62.4	
Deferred tax assets	161.0		171.1	
Valuation allowance.	(70.1)		(67.5)	
Deferred tax assets, net of valuation allowance	90.9		103.6	
Deferred tax liabilities:	 			
Investments	(224.8)		(174.2)	
Other future taxable amounts	(1.8)		(4.5)	
Deferred tax liabilities	(226.6)		(178.7)	
Net deferred tax liability	\$ (135.7)	\$	(75.1)	

The significant components of our tax loss carryforwards and related tax assets at December 31, 2015 are as follows:

Country	Tax loss carryforward		elated x asset	Expiration date
	in m	illions	_	
Chile	\$ 102.0	\$	24.9	Indefinite
The Netherlands	74.1		18.5	2021-2024
Puerto Rico	16.4		6.4	2023-2025
Total	\$ 192.5	\$	49.8	

### Chilean Tax Law Changes

On September 26, 2014, the Chilean President signed an extensive tax reform bill, including changes to the corporate tax rate, changes to the thin capitalization rules, taxation of certain Chilean investments abroad and changes to the stamp tax rate, among other relevant changes. The bill became law on September 29, 2014. The impacts of the tax law changes that are currently in effect are reflected in the attributed financial information. Accordingly, the corporate tax rate for 2015 is 22.5% and will increase during 2016 to 24%. Beginning in 2017, there will be two income tax regimes: the "attributed system" and the "partially integrated system." Under the "partially integrated system," which our Chilean operations will be required to use based on legislation that was enacted on February 1, 2016, the corporate tax rate will be 25.5% in 2017 and 27% in 2018 and future years, and the 35% withholding tax will be paid only upon actual distributions to shareholders. However, under this partially integrated system, only 65% of the corporate tax paid by a Chilean company can be used as a credit against the withholding tax imposed on non-Chilean resident shareholders, which implies a final tax burden of 44.45%. In the case of shareholders resident in countries that have tax treaties in force with Chile, there will be a full credit for the corporate tax paid, which implies a final tax burden of 35% for such shareholders. Currently, there are no tax treaties between Chile and the U.S.

### Notes to Attributed Financial Information — (Continued) December 31, 2015, 2014 and 2013 (unaudited)

### (3) Allocated Expenses

Prior to July 1, 2015, we did not allocate any of the costs of the Liberty Global Group's corporate functions to the LiLAC Group. Following the July 1, 2015 distribution of the LiLAC Shares, we began to allocate a portion of these costs, excluding share-based compensation expense, to the LiLAC Group based primarily on the estimated percentage of time spent by corporate personnel providing services for each group. The allocated amount, which will be re-evaluated periodically and which we expect to cash settle, is presented as inter-group fees and allocations in the attributed statement of operations information. The portion of the Liberty Global Group's corporate costs that will be allocated to the LiLAC Group during the first twelve months following the distribution of the LiLAC Shares will be \$8.5 million.

The share-based compensation expense reflected in the accompanying attributed statement of operations information is based on the share incentive awards held by the employees of the respective entities comprising the Liberty Global Group and the LiLAC Group.

The income tax benefit and expense of the Liberty Global Group and the LiLAC Group includes inter-group tax allocations. For additional information concerning our inter-group tax allocations, see note 2 to this attributed financial information.

While we believe that our allocation methodologies are reasonable, we may elect to change these allocation methodologies or the percentages used to allocate operating and SG&A expenses in the future.

### (4) <u>Inter-group Transactions</u>

### **Inter-group Interests**

On November 16, 2015, we announced the terms of our proposed acquisition of CWC. Following completion of the acquisition of CWC, we intend to attribute CWC to the LiLAC Group, with the Liberty Global Group being granted an inter-group interest in the LiLAC Group. Based on the fully-diluted numbers of Liberty Global Shares, LiLAC Shares and CWC shares outstanding on November 16, 2015, after giving effect to the acquisition and such attribution, and treating the Liberty Global Group's intergroup interest in the LiLAC Group as being represented by additional LiLAC Shares, Liberty Global Group shareholders would have had an approximate 67.4% ownership interest in the LiLAC Group.

#### Capital Contributions

On June 30, 2015, an entity attributed to the Liberty Global Group made a \$100.0 million cash capital contribution to LiLAC Holdings in order to provide liquidity to fund, among other things, the LiLAC Group's ongoing operating costs and acquisitions.

On June 3, 2015, in connection with the Choice Acquisition, an entity attributed to the Liberty Global Group made a \$10.2 million cash capital contribution to an entity attributed to the LiLAC Group to partially fund the purchase price for Choice.

#### Lila Chile Note

On July 11, 2014, Lila Chile Holding and Liberty Global Holding B.V. (**Liberty Global Holding**), an entity attributed to the Liberty Global Group, entered into a loan agreement (the **Lila Chile Note**). At December 31, 2015 and 2014, Liberty Global Holding owed Lila Chile Holding \$1.1 million and \$9.4 million, respectively, in principal pursuant to the Lila Chile Note. The Lila Chile Note bears interest at 5.9% per annum and has a repayment date of July 11, 2022. The principal and accrued interest on the Lila Chile Note are included in other assets, net, in the attributed balance sheet information. Accrued and unpaid interest is generally transferred to the principal balance on January 1 of each year. The net decrease in the Lila Chile Note during 2015 includes (i) cash repayments of \$10.0 million, (ii) cash loans of \$1.4 million and (iii) the transfer of \$0.3 million in non-cash accrued interest to the principal balance. The net increase in the Lila Chile Note during 2014 includes (a) cash loans of \$56.3 million and (b) cash repayments of \$46.9 million.

#### VTR Finance Senior Secured Notes

On January 24, 2014, VTR Finance issued the VTR Finance Senior Secured Notes. The use of proceeds from the VTR Finance Senior Secured Notes to repay debt of UPC Holding has been reflected as a non-cash transaction in this attributed financial information.

Notes to Attributed Financial Information — (Continued) December 31, 2015, 2014 and 2013 (unaudited)

### Related-party Advance

During 2013, VTR Chile Holdings SpA (VTR Chile Holdings), an entity attributed to the LiLAC Group, made a \$600.0 million non-interest bearing advance to UPC Holding, which was repaid in full during 2014. This advance is reflected in intergroup receipts (payments), net, in the attributed statement of cash flows information. The proceeds received from the repayment of this advance were used to fund (i) the \$435.1 million consideration paid by VTR Chile Holdings to acquire the VTR NCI Owner's 20.0% ownership interests in VTR and VTR Wireless SpA, (ii) a \$128.5 million distribution to an entity attributed to the Liberty Global Group, which represented a return of capital, and (iii) the settlement of certain derivative instruments of VTR.

#### **UPC** Broadband France Loan

The UPC Broadband France Loan, as amended, represented amounts owed by VTR to UPC Broadband France SAS (UPC Broadband France), an entity attributed to the Liberty Global Group. The UPC Broadband France Loan bore interest at the Eurodollar Rate (as defined in the UPC Broadband France Loan agreement) plus 2.0%. In January 2014, a parent of UPC Broadband France made a capital contribution in the amount of \$444.9 million to the parent of VTR, which was used to acquire the corresponding loan receivable from UPC Broadband France and pay related accrued interest. Accordingly, the UPC Broadband France Loan was effectively settled within the LiLAC Group. The cash outflow related to Liberty Global Group's capital contribution has been reflected in inter-group receipts (payments), net, in financing activities in the attributed statement of cash flows information and the cash inflow to the Liberty Global Group related to the sale of the loan receivable has been reflected in inter-group receipts, net in investing activities in the attributed statement of cash flows information. The cash effects of these transactions for the LiLAC Group are reflected in inter-group receipts (payments), net, in financing activities in the attributed statement of cash flows information. During 2014 and 2013, VTR incurred related-party interest expense on the UPC Broadband France Loan of \$0.3 million and \$11.1 million, respectively.

#### UPC Chile Mobile Shareholder Loan

Prior to December 31, 2011, Liberty Global Europe, an entity attributed to the Liberty Global Group, had loaned an aggregate of \$99.4 million (the **UPC Chile Mobile Shareholder Loan**) to an entity attributed to the LiLAC Group. The interest rate on the UPC Chile Mobile Shareholder Loan was 9.39% in 2013. In January 2014, the UPC Chile Mobile Shareholder Loan was settled through a non-cash capital contribution by Liberty Global Europe to an entity attributed to the LiLAC Group. During 2014 and 2013, VTR incurred related-party interest expense on the UPC Chile Mobile Shareholder Loan of \$0.3 million and \$10.4 million, respectively.

### LIBERTY GLOBAL PLC Notes to Attributed Financial Information — (Continued) December 31, 2015, 2014 and 2013

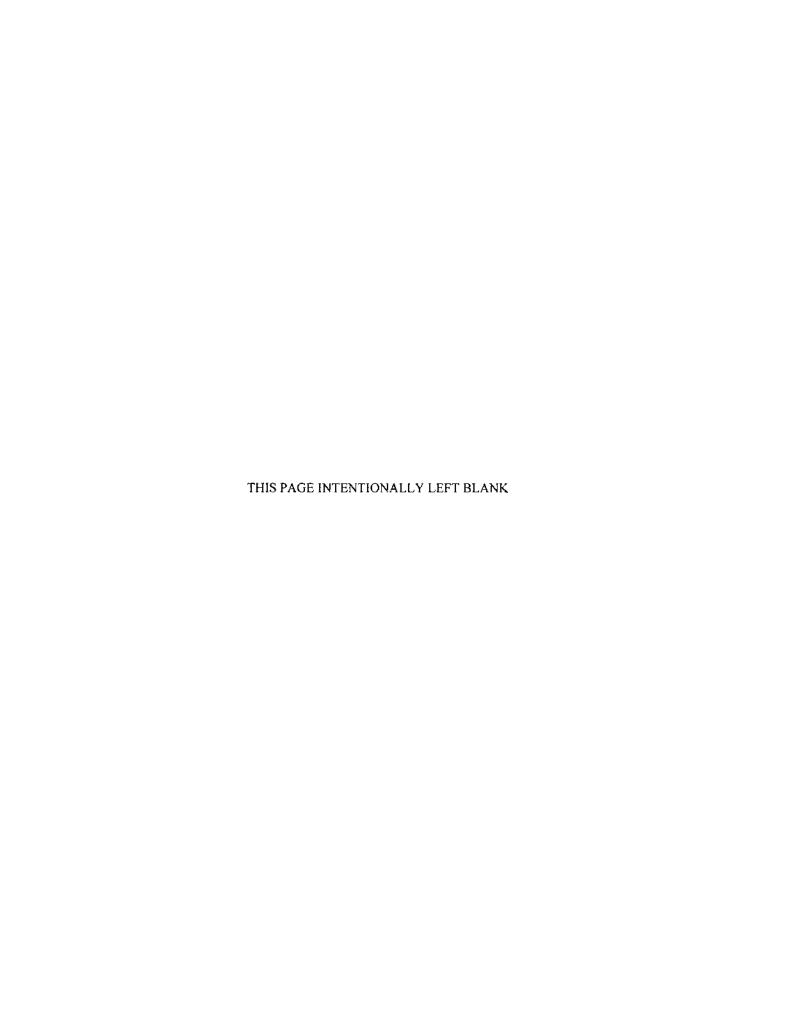
### (5) Commitments

In the normal course of business, we have entered into agreements that commit our company to make cash payments in future periods with respect to programming contracts, network and connectivity commitments, non-cancellable operating leases, purchases of customer premises and other equipment and other items. The following table sets forth the U.S. dollar equivalents of such commitments as of December 31, 2015:

			P	ayments o	lue (	during:				
	2016	2017		2018		2019	2020	T	hereafter	Total
					in	millions				
Liberty Global Group:										
Programming commitments	\$ 937.1	\$ 837.3	\$	651.7	\$	261.3	\$ 7.3	\$	5.7	\$ 2,700.4
Network and connectivity commitments	620.1	217.2		104.6		69.1	57.0		911.7	1,979.7
Purchase commitments	1,027.2	227.2		102.6		47.2	38.1		77.6	1,519.9
Operating leases	136.8	111.6		92.4		71.8	54.3		260.1	727.0
Other commitments	68.2	31.3		23.1		19.3	9.3		17.0	168.2
Total (a)	\$ 2,789.4	\$ 1,424.6	\$	974.4	\$	468.7	\$ 166.0	\$	1,272.1	\$ 7,095.2
LiLAC Group:										
Programming commitments	\$ 67.4	\$ 46.4	\$	46.9	\$	10.9	\$ 3.7	\$	1.9	\$ 177.2
Network and connectivity commitments	26.9	24.5		26.3		21.6	1.2		4.6	105.1
Operating leases	14.8	14.7		14.7		13.3	4.0		16.3	77.8
Purchase commitments	8.9								_	8.9
Total (a)	\$ 118.0	\$ 85.6	\$	87.9	\$	45.8	\$ 8.9	\$	22.8	\$ 369.0

<sup>(</sup>a) The commitments included in this table do not reflect any liabilities that are included in our December 31, 2015 attributed balance sheet information.





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# DO MORE

Setting the stage for accelerated growth as we continue to invest, innovate and do more for our customers.

Our year in stories www.libertyglobal.com/annual-report-2015