U.K. Companies Act Annual Report
December 31, 2016

Registered Number 8379990

Registered Office
Liberty Global plc
Griffin House, 161 Hammersmith Rd, London
W6 8BS
United Kingdom

LIBERTY GLOBAL PLC

2016 U.K. COMPANIES ACT ANNUAL REPORT

TABLE OF CONTENTS

* Appendices only included in the version of this U.K. Companies Act Annual Report that was filed with Companies House. Liberty Global plc's Annual Report on Form 10-K, as amended (**Form 10-K**), and Proxy Statement for the 2017 Annual General Meeting of Shareholders have also been filed with the U.S. Securities and Exchange Commission and copies can be obtained as described under the Strategic Report below.

[THIS PAGE INTENTIONALLY LEFT BLANK]

STRATEGIC REPORT

Liberty Global is a public limited company organized under the laws of England and Wales.

We are subject to disclosure obligations in the U.S. and the U.K. While some of these disclosure requirements overlap or are otherwise similar, some differ and require distinct disclosures. Pursuant to the requirements of the Companies Act, this document includes our strategic report, directors' report and required financial information (including our statutory accounts and statutory Auditors' Report for the year ended December 31, 2016), and forms part of our U.K. annual report and accounts for the year ended December 31, 2016 (the **U.K. Report and Accounts**), as required by English law.

We are also subject to the information and reporting requirements of the U.S. Securities Exchange Act of 1934, as amended (the **Exchange Act**), and, in accordance with the Exchange Act, file periodic reports and other information with the Securities and Exchange Commission (**SEC**), including, without limitation, our 2016 annual report on Form 10-K and our proxy statement on Schedule 14A (the **2017 proxy statement**) for our 2017 annual general meeting. We have incorporated by reference in the U.K. Report and Accounts certain information required by the Companies Act, which information is an important part of the U.K. Report and Accounts, and is deemed to be part hereof. Investors may obtain any of these documents, without charge, from the SEC at the SEC's website at www.sec.gov or from our website at www.libertyglobal.com. The information on our website is not part of this U.K. Report and Accounts and is not incorporated by reference herein.

The capitalized terms used throughout the U.K. Report and Accounts are defined in the notes to our consolidated financial statements unless otherwise indicated. 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.

Unless otherwise indicated, convenience translations into U.S. dollars are calculated, and operational data (including subscriber statistics) are presented, as of December 31, 2016.

For a description of our business (including our model, strategy and competitive strengths), risks associated with our business and our company and management's discussion and analysis of our results of operations (including key performance indicators), see the following sections of our Form 10-K: Part I, Item 1, *Business*, Item 1A, *Risk Factors*, and Part II, Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations* and Item 7A, *Quantitative and Qualitative Disclosures About Market Risk*, each of which sections are herein incorporated by reference.

Employees, Corporate Responsibility and Environmental Matters

The details of our full-time equivalent directors, senior managers and employees by gender as of December 31, 2016, are as follows:

Director (a):	
Male	10
Female	1
	11
Senior manager (a):	
Male	6
Employee (a):	
Male	27,000
Female	14,000
	41,000

____

(a) Employees are included in each category, if applicable. Our senior manager group is comprised of our chief executive officer and our executive vice presidents.

Our employees' development, motivation, health and wellbeing are critical to our business. We aim to create a dynamic, talented workforce that reflects our diverse customers and a culture of innovation in which our 41,000 employees can grow and feel supported. At the heart of this commitment to our employees is 'The People Agenda,' Liberty Global's multi-year people strategy. The People Agenda sets forth our vision for developing and investing in our people across four key areas: Talent, Leadership, Reward and Culture. The People Agenda ensures our employees are supported in their careers, have the tools to work and develop and are engaged in our business, because engaged employees deliver superior business performance. Through the activities of The People Agenda, we aim to provide all our employees with the skills, opportunities, rewards and support they need to reach their full potential at all levels of the organization.

We have a range of employee development programs, such as Fast Forward, focusing on our emerging leaders. Through this program we develop leaders who enable growth, are innovative and able to embrace the opportunities and challenges of this amazing industry. We also have the Lead Forward program, which focuses on developing our senior management. Lead Forward provides a platform and tools for our senior management to improve their personal leadership effectiveness while building a framework for a common culture within the company despite its locations in several different countries. In addition, we provide graduate training and ongoing personal development programs, reflecting our commitment to employee development as a top priority. At Liberty Global, we encourage an inspiring and supportive culture that enables our employees to give their best. We strive to ensure that all of our employees are engaged, informed and aligned with our corporate development goals by communicating often with all employees through email, newsletters and employee meetings.

We give full and fair consideration to all applications for employment, including those from persons with disabilities where the requirements of the job can be adequately fulfilled by a person with disabilities. Where existing employees become disabled, to the extent practicable, we provide continuing employment under normal terms and conditions and provide training and career development and promotion as appropriate.

For more information regarding our corporate responsibility initiatives, including with respect to social, community and human rights issues and environmental matters, see the Directors' Report.

The Strategic Report was approved by the Board of Directors and was signed on its behalf on April 26, 2017 by:

/s/ Brian H. Hall

Bryan H. Hall

Executive Vice President, General Counsel
and Secretary

Company registered number: **8379990**

DIRECTORS' REPORT

Political Donations

At our 2016 annual general meeting, we requested that our company and its subsidiaries generally and unconditionally be authorized, for purposes of Part 14 of the Companies Act, to make or incur payments not to exceed $1 million in the aggregate for political donations (including donations to political organizations and political parties) and political expenditures. The shareholders approved this request, which applies for the period beginning on the date of the 2016 annual general meeting and will expire on the date of our 2017 annual general meeting. Pursuant to such approval, and upon further approval of our board of directors, we contributed £500,000 to the campaign in the U.K. supporting a favorable vote to remain in the European Union. Except for that contribution, we did not make any other political contributions during 2016.

Notwithstanding the above authorization, our code of business conduct prohibits the use of company funds and assets for political contributions to political parties, political party officials and candidates for office, unless approved by our general counsel. Additionally, our charitable giving programs available to employees prohibit political contributions by our company.

Dividends

We have not paid any cash dividends on our ordinary shares, and we have no present intention of so doing. Payment of cash dividends, if any, in the future 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.

Following completion of the CWC Acquisition (as defined in Part II of this Report), we attributed CWC to the LiLAC Group, with the Liberty Global Group being granted an inter-group interest in the LiLAC Group representing the fair value (as determined by our board of directors) of the Liberty Global Shares issued as part of the purchase consideration. On July 1, 2016, we distributed (as a bonus issue) 117,430,965 LiLAC Shares to Liberty Global Group shareholders on a pro-rata basis (the LiLAC Distribution as defined in Part II of this Report), thereby eliminating the Liberty Global Group's inter-group interest in the LiLAC Group.

Share Repurchases

The following table provides details of our share repurchases during 2016:

	Class A Liberty Global Shares		Class C Liberty Global Shares			
	Shares purchased	Average price paid per share (a)	Shares purchased	Average price paid per share (a)	Total cost (a)	% of share capital
					in millions	
Shares purchased pursuant to repurchase programs during the year	32,387,722	$ 32.26	31,557,089	$ 32.43	$ 2,068.0	6.0%

(a) Includes direct acquisition costs and the effects of derivative instruments.

Payment to Creditors - Policy and Practice

We follow the requirements of our vendors for payment, which normally requires payment within 30 to 90 days. We also owe amounts pursuant to interest-bearing vendor financing arrangements that are generally due within one year.

Corporate Responsibility

The internet is one of the most powerful tools ever invented but it's what you do with it that counts. That's why we are focused on the positive potential of connectivity, digital entertainment and technology. It's where we invest, innovate and help to empower people to make the most of the digital revolution.

Our goal will always be to take people further, supporting and inspiring digital imagination by encouraging everyone to be more informed and more ambitious. We equip people with the digital skills needed for the future. We support and invest in original thinkers with their bright new business ideas. We also champion the power of digital technology to bring people together to find collective solutions to the most pressing challenges that impact society.

Connectivity is essential for today's economies, communities and people's everyday lives. This creates an important responsibility to make sure that digital technology works in everyone's best interests. It is our responsibility to continue to invest in our network, deliver outstanding service and protect our customers' privacy as well as to ensure that as the bandwidth we provide grows that our impact on the planet does not.

Everything we do is underpinned by our belief in the liberating potential of technology. We will use it to help people be at their best, to be a business everyone can trust, to fuel imagination and to empower us all to realize our full potential.

Our Approach

Addressing the issues that are most important to our stakeholders and our business is an opportunity for us to strengthen our company and positively influence the communities in which we operate.

We identified and prioritized our most pressing issues by conducting a materiality assessment in 2014. As part of a detailed process, we reviewed our industry peers and the media relevant to our sector, interviewed 11 sustainability experts, surveyed 200 employees and more than 6,000 customers, and held consultation sessions with senior management.

The outcome of this engagement process enabled the prioritization of the issues that are most material to our business and to our stakeholders. Our Corporate Responsibility (**CR**) strategy continues to be shaped by the collective feedback from our stakeholders. The issues that ranked highest include:

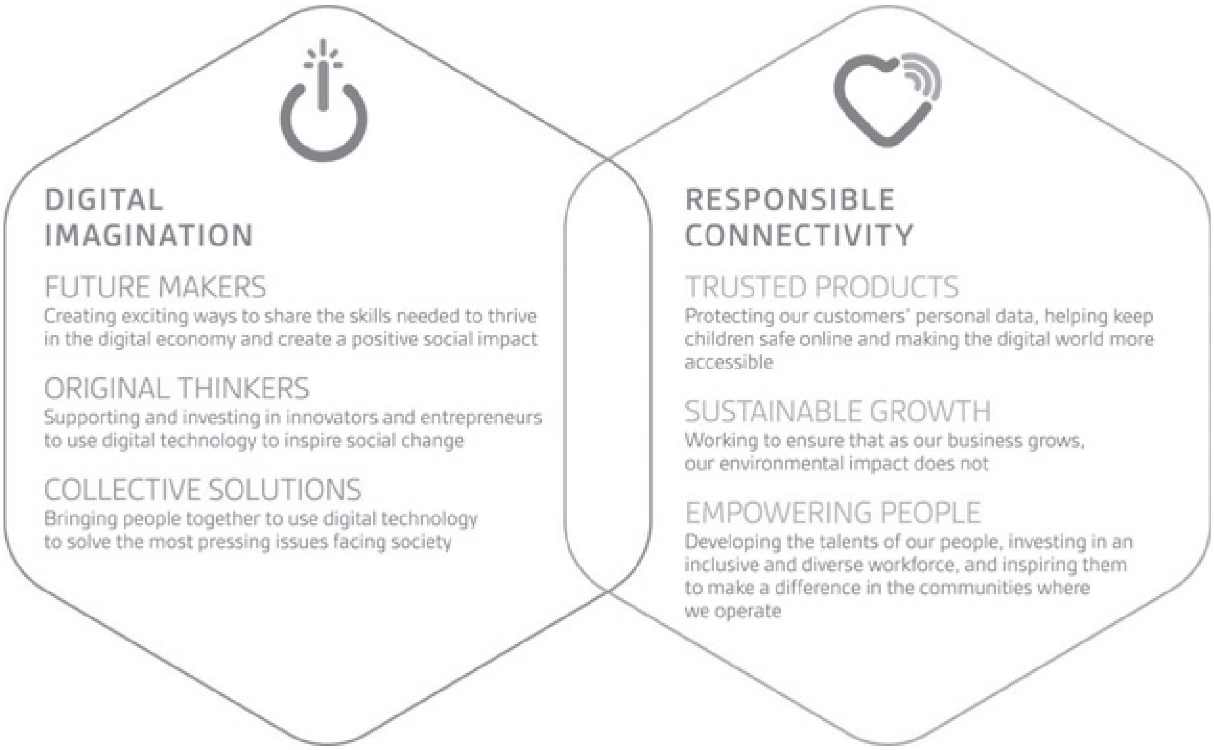
- Protection of privacy and data security;
- Improving energy efficiency;
- Protection of children while online and watching TV;
- Digital inclusion and education;
- Electronic waste reduction; and
- Reducing greenhouse gas (**GHG**) emissions.

These material issues are grouped into two key pillars, as laid out in our CR Framework:

- Digital imagination; and
- Responsible connectivity.

Further details are available at www.libertyglobal.com/cr

Our Corporate Responsibility Framework



Community Investments

We measure the impact of our community investment programs using the globally recognized London Benchmarking Group model. This methodology records the inputs, outputs and positive community impacts of our investments in cash, time and in-kind.

During 2016, our total community contribution was $16.2 million, of which $6.4 million was in the form of cash donations. These figures cover our corporate organization and all of our operations in Europe, Latin America and the Caribbean.

Sustainable Growth

We are working to ensure that as our business grows, our environmental impact does not. Our biggest source of carbon emissions is the energy that powers our networks; therefore, we are focused on deploying solutions that drive down energy use, from our data centers to the equipment in our customers' homes. At the same time, we are adding solar capabilities across our markets and procuring renewable energy in order to reduce our carbon emissions.

Our global environmental statement, published in 2014, sets out our commitment to enhancing the energy efficiency of our operations, with a focus on energy use, carbon emissions and the management of electronic waste.

During 2016, our energy consumption remained relatively flat, increasing by 1% compared to 2015. However, we decreased our market-based carbon emissions by 1% and our location-based emissions by 2%. We also improved our overall energy efficiency by 25% during 2016, and we became 5 times more carbon efficient than we were in 2012.

Our corporate goal is to improve energy efficiency by 15% every year through 2020 and to be five times more carbon efficient by the end of this decade, using our 2012 emissions as our base year.

Further details on Liberty Global's environmental statement and performance are available at www.libertyglobal.com/cr.

Energy Consumption

	Gigawatt-hours					
	Year ended December 31,					
	2016		2015	2014	2013	2012
Non-renewable fuel						
Diesel	125.46		125.97	139.82	155.68	72.23
Petrol	24.80		30.52	26.44	42.62	28.27
Natural Gas	37.07		39.57	42.20	46.84	47.38
Aviation Fuel	11.07		11.10	11.13	12.70	12.70
Gas Oil	1.84		2.06	1.95	2.16	2.52
Fuel Oil	0.33		0.36	0.60	0.76	2.59
Burning Oil	0.01		0.02	0.03	—	0.05
Total	200.58		209.60	222.17	260.76	165.74
Electricity, heating & cooling						
Electricity	1,186.83		1,165.30	1,133.19	1,113.55	1,106.56
Heating & cooling	2.12		3.14	4.48	1.39	—
Electricity sold	(0.01)		(0.01)	(0.01)	(0.01)	(0.05)
Total energy consumption (a)	1,389.52	*	1,378.03	1,359.83	1,375.69	1,272.25

(a) Represents the total energy consumption from non-renewable fuel and electricity, heating and cooling, minus electricity sold.

(*) Within KPMG's independent limited assurance scope. Please see pages I-7 and I-8 for further information.

GHG Emissions

Our GHG emissions are expressed in metric tons of carbon dioxide equivalent (**CO2e**), a universal measure that allows the global warming potential of different GHGs to be compared.

	Metric tons of CO2e					
	2016		2015	2014	2013	2012 (base year)
Scope 1 (Direct)	69,000	*	69,700	70,700	83,400	79,200
Scope 2 market-based (Indirect)	431,100	*	439,200	498,000	437,200	503,500
Scope 2 location-based (Indirect)	456,000	*	472,600	477,100	443,100	450,200
Total Scope 1 & 2 market-based emissions	500,100		508,900	568,700	520,600	582,700
Total Scope 1 & 2 location-based emissions	525,000		542,300	547,800	526,500	529,400
Total market-based emissions per terabyte (**TB**) of data usage (a)	0.028	*	0.038	0.062	0.089	0.145
Scope 3 emissions (Indirect) (b)	60,400	*	57,100	55,600	11,700	12,000
Total Scope 1, 2 & 3 market-based emissions	560,500		566,000	624,300	532,300	594,700
Total Scope 1, 2 & 3 location-based emissions	585,400		599,400	603,400	538,200	541,400
Carbon credits	(0.009)		(0.012)	—	—	—

(a) In order to provide a meaningful target to measure our energy usage against our business operations, we measure our Scope 1 and 2 market-based GHG emissions per TB of data traffic generated as we run our networks and our customers use our services. This calculation reflects internet protocol (**IP**) based data traffic from fixed broadband services, such as web browsing, IP streaming voice and video services, from all of our market operations that we can reliably measure. Approximately 50% of our total revenue is IP based. For more information, please see our full 'Environmental Reporting Criteria' at www.libertyglobal.com/cr/cr-report-2016.

(b) Our Scope 3 indirect emissions include business air and land travel (including the use of employee-owned vehicles for business purposes, flights taken by employees and travel in rental cars, taxis and public transportation); emissions arising from water, waste (which includes the impact of recycling customer premises equipment) and travel by our third-party service and installation vehicles. In 2016, 2015 and 2014, emissions from travel by our third-party service and installation vehicles were included as part of our Scope 3 emissions. This data was excluded in our 2013 and 2012 reporting.

Environmental reporting criteria

All data in this U.K. Report and Accounts covers the period January 1 to December 31, 2016, unless otherwise stated. For comparative purposes, and to create new base-year values for our environmental targets, we have made adjustments to our environmental results for 2012 to include representative pre-acquisition values for Virgin Media, which we acquired on June 7, 2013, and for BASE in Belgium for 2012 through 2015, which we acquired in February 2016. We have excluded Ziggo Group Holding in the Netherlands from our reporting due to the recent formation of the Dutch JV with Vodafone.

Liberty Global's reported environmental data follows the World Resources Institute and World Business Council on Sustainable Development's GHG Protocol Corporate Standard using the operational control approach. This covers our global operations, including Virgin Media, operations under the UPC brand, Unitymedia, Telenet, VTR and Liberty Puerto Rico. We have reported 100% of the emissions from Telenet and Liberty Puerto Rico, in which we had ownership interests of 57.4% and 60.0%, respectively, as of December 31, 2016. Emissions from businesses in which we have non-controlling equity stakes are not included within our reported figures.

Acquisition and disposals

Our policy is to include any new subsidiaries that have been acquired in the first six months of the reporting period. Therefore, we include the recent acquisition of BASE in Belgium (completed in February 2016) and of Tullamore Beta Limited, the parent of TV3, a commercial broadcaster, in Ireland (completed in December 2015) in our 2016 reporting.

In May 2016, we completed the CWC Acquisition. Due to the nature and size of CWC, a readiness review over the 2016 environmental data will be carried out prior to the inclusion of CWC within our 2017 GHG reporting. Therefore, we have excluded CWC from our 2016 data.

In terms of disposals, our policy is to exclude any subsidiaries where we no longer have operational control during the reporting period. In December 2016, we and Vodafone formed the Dutch JV, therefore, we have excluded Ziggo Group Holding from our 2016 reporting.

In terms of our presentation of Virgin Media and BASE performances, please see the comparative data information above.

For more information, please see our full 'Environmental Reporting Criteria' at www.libertyglobal.com/cr/cr-report-2016.

External assurance

We engaged KPMG LLP to undertake independent limited assurance, reporting to Liberty Global, using the assurance standards ISAE 3000 and ISAE 3410, over the energy consumption and GHG emissions that have been highlighted on pages I-5 and I-6 with an *. Their full statement is available on our website at www.libertyglobal.com/cr/cr-report-2016 and they have provided an unqualified opinion on this data.

The level of assurance provided for a limited assurance engagement is substantially lower than a reasonable assurance engagement. In order to reach their opinion they performed a range of procedures, which included interviews with management, examination of reporting systems, site visits to four operating companies, as well as specific data testing at our corporate offices. A summary of the work they performed is included within their assurance opinion.

Non-financial performance information, GHG quantification in particular, is subject to more inherent limitations than financial information. It is important to read the GHG emissions information in the context of the full KPMG LLP limited assurance statement and our reporting criteria as set out in the Liberty Global 'Environmental Reporting Criteria' available at www.libertyglobal.com/cr/cr-report-2016.

Qualifying Indemnity Provisions

Under our articles of association, subject to the provisions of the Companies Act, we may, broadly, (i) indemnify to any extent any person who is or was a director, or a director of any associated company, directly or indirectly against any liability incurred by him or her whether in connection with negligence, default, breach of duty or breach of trust or otherwise by him or her in relation to Liberty Global or any associated company, or in connection with that company's activities as a trustee of an occupational pension scheme and (ii) purchase and maintain insurance for any person who is or was a director, or a director of an associated company, against any loss or liability or any expenditure he or she may incur, whether in connection with any proven or alleged negligence, default, breach of duty or breach of trust by him or her, in relation to Liberty Global or any associated company.

We enter into deeds of indemnity with directors, executive officers and certain other officers and employees (including directors, officers and employees of subsidiaries and other affiliates). These deeds of indemnity require that we indemnify such persons, to the fullest extent permitted by applicable law, against all losses suffered or incurred by them in the event that they are a party to or involved in any claim arising in connection with their appointment as director, officer, employee, agent or fiduciary of Liberty Global or another corporation at the request of Liberty Global.

Directors of the Company during 2016

The following persons were directors of Liberty Global during the year ended December 31, 2016 and up to the date of issuance of the U.K. Report and Accounts:

John C. Malone (Chairman)
Michael T. Fries (Vice Chairman)
Andrew J. Cole
John P. Cole Jr. (until June 16, 2016)
Miranda Curtis
John W. Dick
Paul A. Gould
Richard R. Green
David E. Rapley
Larry E. Romrell
JC Sparkman
J. David Wargo

Directors' Remuneration Report

Details of the directors' compensation (remuneration) and their interests in the shares of Liberty Global are set out in the Directors' Remuneration Report and sections of the 2017 proxy statement (including the Compensation Discussion and Analysis section). For additional information, see *Table of Contents*.

Disclosure of Information to Auditors

The directors who held office at the date of approval of this directors' report confirm that, so far as they are each aware, there is no relevant audit information of which Liberty Global's auditors are unaware; and each director has taken all the steps that they ought to have taken as a director to make themselves aware of any relevant audit information and to establish that Liberty Global's auditors are aware of that information.

Re-Appointment of the Auditors

In accordance with Section 489 of the Companies Act, a resolution for the re-appointment of KPMG LLP (U.K.) as statutory auditors of the company has been proposed at the forthcoming annual general meeting.

The Directors' Report was approved by the Board of Directors and was signed on its behalf on April 26, 2017 by:

/s/ Bryan H. Hall

Bryan H. Hall

Executive Vice President, General Counsel and Secretary

Company registered number: **8379990**

[THIS PAGE INTENTIONALLY LEFT BLANK]

PART II

STATEMENT OF DIRECTORS' RESPONSIBILITIES IN RESPECT OF THE 2016 U.K. COMPANIES ACT ANNUAL REPORT

The directors are responsible for preparing the Strategic Report, the Directors' Report and the financial statements in accordance with applicable U.K. law and regulations.

Company law requires the directors to prepare financial statements for each financial year. Under that law they have elected to prepare the group financial statements in accordance with U.S. GAAP and applicable law, and have elected to prepare the parent company financial statements in accordance with U.K. Accounting Standards and applicable law (U.K. Generally Accepted Accounting Practice), including Financial Reporting Standard 101, *Reduced Disclosure Framework*.

Under company law, the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the group and parent company and of their profit or loss for that period. In preparing each of the group and parent company financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgments and estimates that are reasonable and prudent;
- state whether applicable U.S. GAAP has been followed in the group financial statements, subject to any material departures disclosed and explained in the financial statements;
- state whether applicable U.K. Accounting Standards have been followed in the parent company financial statements, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on a going concern basis unless it is inappropriate to presume that the group and the parent company will continue in business.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the parent company's transactions and disclose with reasonable accuracy at any time the financial position of the parent company and enable them to ensure that its financial statements comply with the Companies Act 2006. They have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the group and to prevent and detect fraud and other irregularities.

The directors are responsible for the maintenance and integrity of the corporate and financial information included on the company's website. Legislation in the U.K. governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF LIBERTY GLOBAL PLC

We have audited the group financial statements of Liberty Global plc for the year ended December 31, 2016 set out on pages II-4 to II-160. The financial reporting framework that has been applied in their preparation is applicable law and accounting principles generally accepted in the United States of America (US GAAP).

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members, as a body, for our audit work, for this report, or for the opinions we have formed.

Respective responsibilities of directors and auditor

As explained more fully in the Directors' Responsibilities Statement set out on page II-1, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. Our responsibility is to audit, and express an opinion on, the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

Scope of the audit of the financial statements

A description of the scope of an audit of financial statements is provided on the Financial Reporting Council's website at www.frc.org.uk/auditscopeukprivate.

Opinion on financial statements

In our opinion the group financial statements:

- give a true and fair view of the state of the group's affairs as at December 31, 2016 and of its profit for the year then ended;
- have been properly prepared in accordance with US GAAP; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

Opinion on other matters prescribed by the Companies Act 2006

In our opinion the information given in the Strategic Report and the Directors' Report for the financial year is consistent with the group financial statements.

Based solely on the work required to be undertaken in the course of the audit of the financial statements and from reading the Strategic Report and the Directors' Report:

- we have not identified material misstatements in those reports; and
- in our opinion, those reports have been prepared in accordance with the Companies Act 2006.

Matters on which we are required to report by exception

We have nothing to report in respect of the following matters where the Companies Act 2006 requires us to report to you if, in our opinion:

- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

Other matter

We have reported separately on the parent company financial statements of Liberty Global plc for the year ended December 31, 2016 and on information in the Directors' Remuneration Report that is described as having been audited.

/s/ JOHN CAIN

John Cain (Senior Statutory Auditor)
for and on behalf of KPMG LLP, Statutory Auditor
Chartered Accountants
15 Canada Square, London, E14 5GL
April 26, 2017

LIBERTY GLOBAL PLC

CONSOLIDATED BALANCE SHEETS

	December 31,			
	2016		2015	
	Form 10-K (a)	Companies Act (a)	Form 10-K (a)	Companies Act (a)
	in millions			
ASSETS				
Fixed assets:				
Intangible assets not subject to amortization (note 9)	$ 610.3	$ 610.3	$ 690.5	$ 690.5
Intangible assets subject to amortization, net (notes 9 and 21)	3,657.7	3,657.7	7,092.5	7,092.5
Goodwill (note 9)	23,366.3	23,366.3	27,020.4	27,020.4
Total intangible assets and goodwill	27,634.3	27,634.3	34,803.4	34,803.4
Property and equipment, net (notes 9 and 21)	21,110.2	21,110.2	21,684.0	21,684.0
Investments (including $2,057.2 million and $2,591.8 million, respectively, measured at fair value on a recurring basis) (note 6 and 21)	6,483.7	6,483.7	2,839.6	2,839.6
Total fixed assets	55,228.2	55,228.2	59,327.0	59,327.0
Current assets:				
Trade receivables, net	1,906.5	1,906.5	1,467.7	1,467.7
Other assets: amounts recoverable in less than one year	513.4	513.4	215.8	215.8
Other assets: amounts recoverable in more than one year (notes 2, 7 and 11)	6,399.1	6,399.1	5,180.6	5,180.6
Receivable from the Dutch JV (note 5)	2,346.6	2,346.6	—	—
Derivative instruments (note 7)	412.7	412.7	421.9	421.9
Prepaid expenses	209.4	209.4	144.2	144.2
Total debtors and other assets	11,787.7	11,787.7	7,430.2	7,430.2
Cash and cash equivalents	1,629.2	1,629.2	982.1	982.1
Restricted cash	39.0	39.0	127.9	127.9
Total current assets	13,455.9	13,455.9	8,540.2	8,540.2
Total assets	$ 68,684.1	$ 68,684.1	$ 67,867.2	$ 67,867.2

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY GLOBAL PLC

CONSOLIDATED BALANCE SHEETS — (Continued)

	December 31,			
	2016		2015	
	Form 10-K (a)	Companies Act (a)	Form 10-K (a)	Companies Act (a)
	in millions			
LIABILITIES				
Creditors — amounts falling due within one year:				
Current portion of debt (note 10)	$ 2,644.2	$ 2,644.2	$ 2,382.1	$ 2,382.1
Current portion of capital lease obligations (note 10)	130.9	130.9	155.8	155.8
Total current portion of debt and capital lease obligations	2,775.1	2,775.1	2,537.9	2,537.9
Accounts payable	1,168.2	1,168.2	1,050.1	1,050.1
Provisions for liabilities (notes 14 and 21)	230.2	230.2	226.5	226.5
Deferred revenue and advance payments from subscribers and others	1,240.1	1,240.1	1,393.5	1,393.5
Accrued interest	671.4	671.4	832.8	832.8
Accrued income taxes	457.9	457.9	483.5	483.5
Accrued capital expenditures	765.4	765.4	441.8	441.8
Other accrued and current liabilities (note 7)	2,414.5	2,414.5	2,191.8	2,191.8
Deferred revenue, derivatives, accruals and other current liabilities	5,549.3	5,549.3	5,343.4	5,343.4
Total creditors: amounts falling due within one year	9,722.8	9,722.8	9,157.9	9,157.9
Net current liabilities	3,733.1	3,733.1	(617.7)	(617.7)
Total assets less current liabilities	58,961.3	58,961.3	58,709.3	58,709.3
Creditors — amounts falling due after one year:				
Long-term debt (note 10)	39,671.8	39,671.8	43,352.4	43,352.4
Long-term capital lease obligations (note 10)	1,111.8	1,111.8	1,167.0	1,167.0
Total long-term debt and capital lease obligations	40,783.6	40,783.6	44,519.4	44,519.4
Other non-current liabilities (notes 7 and 11)	1,095.4	1,095.4	3,173.1	3,173.1
Deferred income and deposits	330.9	330.9	130.0	130.0
Total creditors: amounts falling due after one year	42,209.9	42,209.9	47,822.5	47,822.5
Provisions for liabilities (notes 11, 14, 15 and 21)	2,019.4	2,019.4	712.5	712.5
Total liabilities	$ 53,952.1	$ 53,952.1	$ 57,692.9	$ 57,692.9
Commitments and contingencies (notes 4, 7, 10, 11, 15, 17 and 20)				

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY GLOBAL PLC

CONSOLIDATED BALANCE SHEETS — (Continued)

	December 31,			
	2016		2015	
	Form 10-K (a)	Companies Act (a)	Form 10-K (a)	Companies Act (a)
	in millions			
EQUITY				
Equity (note 12):				
Liberty Global shareholders:				
Liberty Global Shares — Class A, $0.01 nominal value. Issued and outstanding 253,827,604 and 252,766,455 shares, respectively	$ 2.5	$ 2.5	$ 2.5	$ 2.5
Liberty Global Shares — Class B, $0.01 nominal value. Issued and outstanding 10,805,850 and 10,472,517 shares, respectively	0.1	0.1	0.1	0.1
Liberty Global Shares — Class C, $0.01 nominal value. Issued and outstanding 634,391,072 and 584,044,394 shares, respectively	6.3	6.3	5.9	5.9
LiLAC Shares — Class A, $0.01 nominal value. Issued and outstanding 50,317,930 and 12,630,580 shares, respectively	0.5	0.5	0.1	0.1
LiLAC Shares — Class B, $0.01 nominal value. Issued and outstanding 1,888,323 and 523,423 shares, respectively	—	—	—	—
LiLAC Shares — Class C, $0.01 nominal value. Issued and outstanding 120,889,034 and 30,772,874 shares, respectively	1.2	1.2	0.3	0.3
Additional paid-in capital	17,578.2		14,908.1	
Share premium reserve (component of additional paid-in capital in our Form 10-K) (b)		1,103.5		986.2
Merger reserve (component of additional paid-in capital in Form 10-K) (b)		10,083.5		5,594.6
Share option and other reserves (component of additional paid-in capital in our Form 10-K)		6,391.2		8,327.3
Accumulated deficit	(3,454.8)	(3,454.8)	(5,160.1)	(5,160.1)
Accumulated other comprehensive earnings (loss), net of taxes	(372.4)	(372.4)	895.9	895.9
Treasury shares, at cost	(0.3)	(0.3)	(0.4)	(0.4)
Total Liberty Global shareholders	13,761.3	13,761.3	10,652.4	10,652.4
Noncontrolling interests	970.7	970.7	(478.1)	(478.1)
Total equity	14,732.0	14,732.0	10,174.3	10,174.3
Total liabilities and equity	$ 68,684.1	$ 68,684.1	$ 67,867.2	$ 67,867.2

(a) In order to comply with the Companies Act, amounts have been reclassified in the case of the Form 10-K columns and further adjusted in the case of the Companies Act columns from those that were presented in our Form 10-K. See note 1.

(b) Merger reserve includes the premium on shares issued in connection with (i) the Ziggo Acquisition in 2014, which was previously reported in share premium reserve, and (ii) the CWC Acquisition in 2016. See note 4 for further information on the CWC and Ziggo acquisitions.

The financial statements were approved by the Board of Directors and were signed on its behalf on April 26, 2017 by:

/s/ Michael T. Fries

Michael T. Fries
President, Chief Executive Officer and Director
Company registered number: **8379990**

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY GLOBAL PLC

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year ended December 31,					
	2016		2015		2014	
	Form 10-K (a)	Companies Act (a)	Form 10-K (a)	Companies Act (a)	Form 10-K (a)	Companies Act (a)
	in millions, except share and per share amounts					
Revenue (note 18)	$ 20,008.8	$ 20,008.8	$ 18,280.0	$ 18,280.0	$ 18,248.3	$ 18,274.9
Operating costs and expenses (exclusive of depreciation and amortization, shown separately below):						
Programming and other direct costs of services	4,606.2	4,606.2	4,104.0	4,104.0	4,043.1	4,058.4
Other operating (note 13)	2,884.8	2,884.8	2,655.2	2,655.2	2,775.8	2,779.3
Depreciation and amortization	5,801.1	6,185.8	5,825.8	5,825.8	5,500.1	5,500.1
Cost of revenue	13,292.1	13,676.8	12,585.0	12,585.0	12,319.0	12,337.8
	6,716.7	6,332.0	5,695.0	5,695.0	5,929.3	5,937.1
Administrative expenses including selling, general and other expenses (**SG&A**) (note 13)	3,566.9	3,566.9	3,171.7	3,171.7	3,164.3	3,171.6
Impairment, restructuring and other operating items, net (notes 4, 9, 14 and 15)	348.5	348.5	174.1	174.1	536.8	536.7
Other operating income	348.5	348.5	174.1	174.1	536.8	536.7
	17,207.5	17,592.2	15,930.8	15,930.8	16,020.1	16,046.1
Operating income	2,801.3	2,416.6	2,349.2	2,349.2	2,228.2	2,228.8
Interest, financial and other items:						
Interest expense	(2,638.4)	(2,638.4)	(2,441.4)	(2,441.4)	(2,544.7)	(2,544.8)
Financial and other items:						
Gains on derivative instruments, net (note 7)	845.1	845.1	847.2	847.2	88.8	88.9
Foreign currency transaction losses, net	(290.0)	(290.0)	(1,149.2)	(1,149.2)	(836.5)	(837.9)
Gains (losses) due to changes in fair values of certain investments and debt, net (notes 6, 8 and 10)	(461.5)	(461.5)	124.5	124.5	205.2	(39.5)
Losses on debt modification and extinguishment, net (note 10)	(237.2)	(237.2)	(388.0)	(388.0)	(186.2)	(186.2)
Settlement of equity-related derivative instrument (note 21)	—	—	—	—	—	258.4
Gains due to changes in ownership (note 21)	520.8	809.3	—	—	—	671.7
Gain on disposal of discontinued operation	—	—	—	—	—	333.5
Other income (expense), net (note 21)	9.3	9.3	(26.9)	(26.9)	(10.7)	(79.6)
	386.5	675.0	(592.4)	(592.4)	(739.4)	209.3
Earnings (loss) from continuing operations before income taxes	549.4		(684.6)		(1,055.9)	
Earnings (loss) before income taxes		453.2		(684.6)		(106.7)
Income tax benefit (expense) (note 11)	1,217.9	1,314.1	(364.9)	(364.9)	75.0	74.9
Earnings (loss) from continuing operations	$ 1,767.3		$ (1,049.5)		$ (980.9)	

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY GLOBAL PLC

CONSOLIDATED STATEMENTS OF OPERATIONS — (Continued)

	Year ended December 31,					
	2016		2015		2014	
	Form 10-K (a)	Companies Act (a)	Form 10-K (a)	Companies Act (a)	Form 10-K (a)	Companies Act (a)
	in millions, except share and per share amounts					
Discontinued operation (note 5):						
Earnings from discontinued operation, net of taxes	$ —		$ —		$ 0.8	
Gain on disposal of discontinued operation, net of taxes	—		—		332.7	
	—		—		333.5	
Net earnings (loss)	1,767.3	1,767.3	(1,049.5)	(1,049.5)	(647.4)	(31.8)
Net earnings attributable to noncontrolling interests	(62.0)	(62.0)	(103.0)	(103.0)	(47.6)	(47.6)
Net earnings (loss) attributable to Liberty Global shareholders	$ 1,705.3	$ 1,705.3	$ (1,152.5)	$ (1,152.5)	$ (695.0)	$ (79.4)
Basic earnings (loss) attributable to Liberty Global shareholders per share (notes 1 and 3):						
Liberty Global Shares	$ 2.18	$ 2.18	$ (0.19)	$ (0.19)		
LiLAC Shares	$ (2.13)	$ (2.13)	$ 0.39	$ 0.39		
Old Liberty Global Shares:						
Continuing operations			$ (1.13)		$ (1.29)	
Discontinued operation			—		0.42	
			$ (1.13)	$ (1.13)	$ (0.87)	$ (0.10)
Diluted earnings (loss) attributable to Liberty Global shareholders per share (notes 1 and 3):						
Liberty Global Shares	$ 2.16	$ 2.16	$ (0.19)	$ (0.19)		
LiLAC Shares	$ (2.13)	$ (2.13)	$ 0.39	$ 0.39		
Old Liberty Global Shares:						
Continuing operations			$ (1.13)		$ (1.29)	
Discontinued operation			—		0.42	
			$ (1.13)	$ (1.13)	$ (0.87)	$ (0.10)

(a) In order to comply with the Companies Act, amounts have been reclassified in the case of the Form 10-K columns and further adjusted in the case of the Companies Act columns from those that were presented in our Form 10-K. See note 1.

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY GLOBAL PLC

CONSOLIDATED STATEMENTS OF COMPREHENSIVE EARNINGS (LOSS)

	Year ended December 31,					
	2016		2015		2014	
	Form 10-K (a)	Companies Act (a)	Form 10-K (a)	Companies Act (a)	Form 10-K (a)	Companies Act (a)
	in millions					
Net earnings (loss)	$ 1,767.3	$ 1,767.3	$ (1,049.5)	$ (1,049.5)	$ (647.4)	$ (31.8)
Other comprehensive earnings (loss), net of taxes (note 16):						
Foreign currency translation adjustments	(1,966.9)	(1,966.9)	(732.9)	(732.9)	(935.9)	(932.6)
Reclassification adjustments included in net earnings (loss) (note 5)	715.7	715.7	1.5	1.5	124.4	124.4
Pension-related adjustments and other	(20.2)	(20.2)	(18.8)	(18.8)	(71.2)	(71.2)
Other comprehensive loss	(1,271.4)	(1,271.4)	(750.2)	(750.2)	(882.7)	(879.4)
Comprehensive earnings (loss)	495.9	495.9	(1,799.7)	(1,799.7)	(1,530.1)	(911.2)
Comprehensive earnings attributable to noncontrolling interests	(58.9)	(58.9)	(103.5)	(103.5)	(47.1)	(47.1)
Comprehensive earnings (loss) attributable to Liberty Global shareholders	$ 437.0	$ 437.0	$ (1,903.2)	$ (1,903.2)	$ (1,577.2)	$ (958.3)

(a) In order to comply with the Companies Act, amounts have been reclassified in the case of the Form 10-K columns and further adjusted in the case of the Companies Act columns from those that were presented in our Form 10-K. See note 1.

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY GLOBAL PLC

CONSOLIDATED STATEMENTS OF EQUITY

	Liberty Global shareholders								Non-controlling interests	Total equity
	Old Liberty Global Shares			Additional paid-in capital	Accumulated deficit (a)	Accumulated other comprehensive earnings, net of taxes (a)	Treasury shares, at cost	Total Liberty Global shareholders		
Form 10-K	Class A	Class B	Class C							
						in millions				
Balance at January 1, 2014	$ 2.2	$ 0.1	$ 5.6	$ 12,809.4	$ (3,312.6)	$ 2,528.8	$ (7.7)	$ 12,025.8	$ (484.3)	$ 11,541.5
Net loss	—	—	—	—	(695.0)	—	—	(695.0)	47.6	(647.4)
Other comprehensive loss, net of taxes (note 16)	—	—	—	—	—	(882.2)	—	(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	(185.4)	—
Shares issued in connection with the Ziggo Acquisition (note 4)	0.3	—	0.8	4,904.7	—	—	—	4,905.8	1,080.6	5,986.4
Impact of Ziggo NCI Acquisition and Statutory Squeeze-out (note 4)	—	—	0.1	663.8	—	—	—	663.9	(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)	—	—	3.5	(108.3)	24.1	(84.2)
Balance at December 31, 2014	$ 2.5	$ 0.1	$ 6.3	$ 17,070.8	$ (4,007.6)	$ 1,646.6	$ (4.2)	$ 14,714.5	$ (598.5)	$ 14,116.0
Companies Act (b)										
Companies Act categories:										
Share premium reserve (c)				$ 902.2						
Merger reserve (c)				5,594.6						
Share option and other reserves				10,574.0						
				$ 17,070.8						

The accompanying notes are an integral part of these consolidated financial statements.

(a) Our rollforward for the Companies Act is shown below. See note 1.

	Liberty Global shareholders	
	Accumulated deficit	Accumulated other comprehensive earnings, net of taxes
	in millions	
Companies Act		
Balance at January 1, 2014	$ (3,928.2)	$ 2,525.5
Net loss	(79.4)	—
Other comprehensive loss, net of taxes	—	(878.9)
Balance at December 31, 2014	$ (4,007.6)	$ 1,646.6

(b) Additional information presented to comply with the Companies Act. See note 1.

(c) Merger reserve includes the premium on shares issued in connection with the Ziggo Acquisition in 2014, which was previously reported in share premium reserve. See note 4 for further information on the Ziggo acquisition.

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY GLOBAL PLC

CONSOLIDATED STATEMENTS OF EQUITY — (Continued)

Form 10-K	Liberty Global shareholders: Liberty Global Shares	LiLAC Shares	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	Total equity
						in millions				
Balance at January 1, 2015	$ —	$ —	$ 8.9	$ 17,070.8	$ (4,007.6)	$ 1,646.6	$ (4.2)	$ 14,714.5	$ (598.5)	$ 14,116.0
Net loss	—	—	—	—	(1,152.5)	—	—	(1,152.5)	103.0	(1,049.5)
Other comprehensive loss, net of taxes (note 16)	—	—	—	—	—	(750.7)	—	(750.7)	0.5	(750.2)
Repurchase and cancellation of Liberty Global ordinary shares (note 12)	(0.1)	—	(0.1)	(2,344.3)	—	—	—	(2,344.5)	—	(2,344.5)
Share-based compensation (note 13)	—	—	—	284.3	—	—	—	284.3	—	284.3
Impact of the LiLAC Transaction (note 1)	8.7	0.4	(8.7)	(0.4)	—	—	—	—	—	—
Adjustments due to changes in subsidiaries' equity and other, net (note 12)	(0.1)	—	(0.1)	(102.3)	—	—	3.8	(98.7)	16.9	(81.8)
Balance at December 31, 2015	$ 8.5	$ 0.4	$ —	$ 14,908.1	$ (5,160.1)	$ 895.9	$ (0.4)	$ 10,652.4	$ (478.1)	$ 10,174.3
Companies Act (a)										
Companies Act categories:										
Share premium reserve (b)				$ 986.2						
Merger reserve (b)				5,594.6						
Share option and other reserves				8,327.3						
				$ 14,908.1						

(a) Additional information presented to comply with the Companies Act. See note 1.

(b) Merger reserve includes the premium on shares issued in connection with the Ziggo Acquisition in 2014, which was previously reported in share premium reserve. See note 4 for further information on the Ziggo acquisition.

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY GLOBAL PLC

CONSOLIDATED STATEMENTS OF EQUITY — (Continued)

	Liberty Global shareholders								
	Liberty Global Shares	LiLAC Shares	Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive earnings (loss), net of taxes	Treasury shares, at cost	Total Liberty Global shareholders	Non-controlling interests	Total equity
					in millions				
Balance at January 1, 2016	$ 8.5	$ 0.4	$ 14,908.1	$ (5,160.1)	$ 895.9	$ (0.4)	$ 10,652.4	$ (478.1)	$ 10,174.3
Net earnings	—	—	—	1,705.3	—	—	1,705.3	62.0	1,767.3
Other comprehensive loss, net of taxes (notes 5 and 16)	—	—	—	—	(1,268.3)	—	(1,268.3)	(3.1)	(1,271.4)
Impact of the CWC Acquisition (note 4)	1.1	0.1	4,488.9	—	—	—	4,490.1	1,451.8	5,941.9
Repurchase and cancellation of Liberty Global ordinary shares (note 12)	(0.6)	—	(2,088.9)	—	—	—	(2,089.5)	—	(2,089.5)
Share-based compensation (note 13)	—	—	269.0	—	—	—	269.0	—	269.0
Liberty Global call option contracts (note 12)	—	—	119.1	—	—	—	119.1	—	119.1
Impact of the LiLAC Distribution (note 4)	—	1.2	(1.2)	—	—	—	—	—	—
Adjustments due to changes in subsidiaries' equity and other, net	(0.1)	—	(116.8)	—	—	0.1	(116.8)	(61.9)	(178.7)
Balance at December 31, 2016	$ 8.9	$ 1.7	$ 17,578.2	$ (3,454.8)	$ (372.4)	$ (0.3)	$ 13,761.3	$ 970.7	$ 14,732.0
Companies Act (a)									
Companies Act categories:									
Share premium reserve (b)			$ 1,103.5						
Merger reserve (b)			10,083.5						
Share option and other reserves			6,391.2						
			$ 17,578.2						

(a) Additional information presented to comply with the Companies Act. See note 1.

(b) Merger reserve includes the premium on shares issued in connection with (i) the Ziggo Acquisition in 2014, which was previously reported in share premium reserve, and (ii) the CWC Acquisition in 2016. See note 4 for further information on the CWC and Ziggo acquisitions.

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY GLOBAL PLC

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year ended December 31,		
	2016	2015	2014
		in millions	
Cash flows from operating activities:			
Net earnings (loss)	$ 1,767.3	$ (1,049.5)	$ (647.4)
Earnings from discontinued operation	—	—	(333.5)
Earnings (loss) from continuing operations	1,767.3	(1,049.5)	(980.9)
Adjustments to reconcile earnings (loss) from continuing operations to net cash provided by operating activities:			
Share-based compensation expense	296.9	318.2	257.2
Depreciation and amortization	5,801.1	5,825.8	5,500.1
Impairment, restructuring and other operating items, net	348.5	174.1	536.8
Amortization of deferred financing costs and non-cash interest	67.9	80.8	84.3
Gains on derivative instruments, net	(845.1)	(847.2)	(88.8)
Foreign currency transaction losses, net	290.0	1,149.2	836.5
Losses (gains) due to changes in fair values of certain investments and debt, including impact of dividends	477.0	(121.4)	(203.7)
Losses on debt modification and extinguishment, net	237.2	388.0	186.2
Gain on Dutch JV Transaction	(520.8)	—	—
Deferred income tax benefit	(1,520.0)	(50.1)	(350.6)
Excess tax benefits from share-based compensation	(4.4)	(26.7)	(7.0)
Changes in operating assets and liabilities, net of the effects of acquisitions and dispositions:			
Receivables and other operating assets	457.9	566.5	860.5
Payables and accruals	(918.0)	(701.9)	(1,017.8)
Net cash used by operating activities of discontinued operation	—	—	(9.6)
Net cash provided by operating activities	5,935.5	5,705.8	5,603.2
Cash flows from investing activities:			
Capital expenditures	(2,644.3)	(2,499.5)	(2,684.4)
Cash paid in connection with acquisitions, net of cash acquired	(1,384.5)	(385.8)	(73.3)
Sale of investments	147.3	—	—
Investments in and loans to affiliates and others	(140.9)	(999.6)	(1,016.6)
Proceeds received upon disposition of discontinued operation, net of disposal costs	—	—	988.5
Other investing activities, net	104.7	55.5	(13.8)
Net cash used by investing activities of discontinued operation, including deconsolidated cash	—	—	(3.8)
Net cash used by investing activities	$ (3,917.7)	$ (3,829.4)	$ (2,803.4)

The accompanying notes are an integral part of these consolidated financial statements.

LIBERTY GLOBAL PLC

CONSOLIDATED STATEMENTS OF CASH FLOWS — (Continued)

	Year ended December 31,		
	2016	2015	2014
		in millions	
Cash flows from financing activities:			
Borrowings of debt	$ 13,680.8	$ 15,230.4	$ 9,572.4
Repayments and repurchases of debt and capital lease obligations	(12,544.4)	(13,881.4)	(11,316.1)
Repurchase of Liberty Global ordinary shares	(1,968.3)	(2,320.5)	(1,584.9)
Payment of financing costs and debt premiums	(253.9)	(423.3)	(379.8)
Net cash paid related to derivative instruments	(251.5)	(301.2)	(221.0)
Change in cash collateral	106.3	(56.1)	(58.7)
Purchase of additional shares of subsidiaries	—	(142.4)	(260.7)
Other financing activities, net	(154.7)	(143.3)	(11.3)
Net cash used by financing activities of discontinued operation	—	—	(1.2)
Net cash used by financing activities	(1,385.7)	(2,037.8)	(4,261.3)
Effect of exchange rate changes on cash – continuing operations	15.0	(15.0)	(81.9)
Net increase (decrease) in cash and cash equivalents:			
Continuing operations	647.1	(176.4)	(1,528.8)
Discontinued operation	—	—	(14.6)
Net increase (decrease) in cash and cash equivalents	647.1	(176.4)	(1,543.4)
Cash and cash equivalents:			
Beginning of year	982.1	1,158.5	2,701.9
End of year	$ 1,629.2	$ 982.1	$ 1,158.5
Cash paid for interest – continuing operations	$ 2,608.0	$ 2,170.4	$ 2,376.7
Net cash paid for taxes:			
Continuing operations	$ 440.7	$ 236.3	$ 97.3
Discontinued operation	—	—	2.2
Total	$ 440.7	$ 236.3	$ 99.5

The accompanying notes are an integral part of these consolidated financial statements.

(1) Basis of Presentation

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, mobile and other communications services to residential customers and businesses, with consolidated operations at December 31, 2016 in more than 30 countries.

In Europe, we provide residential and business-to-business (**B2B**) services in (i) the United Kingdom (**U.K.**) and Ireland through Virgin Media Inc. (**Virgin Media**), (ii) Germany through Unitymedia GmbH (**Unitymedia**), (iii) Belgium through Telenet Group Holding N.V. (**Telenet**), a 57.4%-owned subsidiary, and (iv) seven other European countries through UPC Holding B.V. (**UPC Holding**). In addition, through the December 31, 2016 completion of the Dutch JV Transaction (as defined and described in note 5), we provided residential and B2B services in the Netherlands through VodafoneZiggo Holding B.V., formerly known as Ziggo Group Holding B.V., which we refer to herein as "**Ziggo Group Holding**." Virgin Media, Unitymedia and UPC Holding are each wholly-owned subsidiaries of Liberty Global. The operations of Virgin Media, Unitymedia, Telenet, UPC Holding and, through December 31, 2016, Ziggo Group Holding are collectively referred to herein as the "**European Division**."

Outside of Europe, we provide residential and B2B services in (i) 18 countries, predominantly in Latin America and the Caribbean, through our wholly-owned subsidiary Cable & Wireless Communications Limited (formerly known as Cable & Wireless Communications Plc) (**CWC**), (ii) Chile through our wholly-owned subsidiary VTR.com SpA (**VTR**) and (iii) Puerto Rico through Liberty Cablevision of Puerto Rico LLC (**Liberty Puerto Rico**), an entity in which we hold a 60.0% ownership interest. CWC also provides (a) B2B services in certain other countries in Latin America and the Caribbean and (b) wholesale services over its sub-sea and terrestrial networks that connect over 30 markets in that region. CWC owns less than 100% of certain of its consolidated subsidiaries, including Cable & Wireless Panama, SA (**CWC Panama**) (a 49.0%-owned entity that owns most of our operations in Panama), The Bahamas Telecommunications Company Limited (**CWC BTC**) (a 49.0%-owned entity that owns all of our operations in the Bahamas), Cable & Wireless Jamaica Limited (**CWC Jamaica**) (an 82.0%-owned entity that owns the majority of our operations in Jamaica) and Cable & Wireless Barbados Limited (**CWC Barbados**) (an 81.1%-owned entity that owns the majority of our operations in Barbados). The operations of CWC, 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**" refers to our previously-outstanding Class A, Class B and Class C Liberty Global ordinary 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. 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, (a) our net earnings (loss) attributed to Liberty Global Shares and LiLAC Shares relates to periods subsequent to July 1, 2015 and (b) our net loss attributed to Old Liberty Global Shares relates to 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) LGE Coral Holdco Limited (**LGE Coral**) and its subsidiaries, which include CWC, (ii) VTR Finance B.V. (**VTR Finance**) and its subsidiaries, which include VTR, (iii) Lila Chile Holding B.V. (**Lila Chile Holding**), which is the parent entity of VTR Finance, (iv) LiLAC Communications Inc. (formerly known as LiLAC Holdings Inc.) (**LiLAC Communications**) and its subsidiaries, which include Liberty Puerto Rico, 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 Communications. The "**Liberty Global Group**" comprises our businesses, assets and liabilities not attributed to the LiLAC Group, including Virgin Media, Ziggo Group Holding (through December 31, 2016), Unitymedia, Telenet, UPC Holding, our corporate entities (excluding LiLAC Communications) 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 our December 31, 2016 Annual Report on Form 10-K, as amended (**Form 10-K**) as filed with the U.S. Securities and Exchange Commission.

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, 2016.

The directors have elected to prepare our consolidated financial statements in accordance with accounting principles generally accepted in the United States (**U.S. GAAP**) for purposes of our 2016, 2015 and 2014 U.K. statutory annual reports, as permitted by the U.K. Companies Act 2006 (**Companies Act**) to the extent that those principles do not contravene with any provisions of the Companies Act. Accordingly, in order to comply with the Companies Act, we have revised the presentation of our consolidated balance sheets, statements of operations, statements of comprehensive earnings (loss) and statements of equity from that which we included in our 2016 Form 10-K. In addition, we have included Companies Act columns or tables in these statements, as applicable, that have been further adjusted (i) to re-present the held-for sale presentation of Ziggo Group Holding and Ziggo Sport from August 3, 2016 through the December 31, 2016 completion of the Dutch JV Transaction (as defined and described in note 5), which resulted in a $384.7 million increase to depreciation and amortization, a $288.5 million increase to gain on changes in ownership and a $96.2 million increase to income tax benefit, (ii) to account for our investment in Ziggo during 2014 (as defined in note 4) under the equity method of accounting instead of the fair value method prior to the Ziggo Acquisition (as defined in note 4), which resulted in a $615.6 million decrease to our net loss and a $3.3 million decrease to our other comprehensive loss for the year ended December 31, 2014, (iii) to re-present our discontinued operation (the Chellomedia Disposal Group for the year ended December 31, 2014) from discontinued to continuing operations and (iv) to add notes 21 and 22, which contain certain supplemental disclosures required by the Companies Act, including information with respect to the application of the equity method of accounting to our Ziggo investment during 2014. Due to materiality considerations, we have not adjusted our footnote disclosures to re-present (a) the held-for sale presentation of Ziggo Group Holding and Ziggo Sport from August 3, 2016 through the December 31, 2016 completion of the Dutch JV Transaction and (b) the Chellomedia Disposal Group to continuing operations. Under U.S. GAAP, we do not amortize goodwill or certain other intangible assets. Instead goodwill and certain other intangible assets are carried at cost less impairment, as described in note 3. The Companies Act, in accordance with the Large and Medium-sized Companies and Group (Accounts and Reports) Regulations 2008, also requires that goodwill and other intangible assets be carried at cost, as reduced by provisions for depreciation calculated to write off the goodwill systematically over a period chosen by the directors, which does not exceed its useful economic life. However, the directors consider that this would fail to give a true and fair view of our results for the year and that the economic measure of performance in any period is properly made by reference only to any impairment that may have arisen. It is not practicable to quantify the effect on the financial statements of this departure. Any impairment charge would be included in operating income (loss).

(2) Accounting Changes and Recent Accounting Pronouncements

Accounting Changes

In April 2015, the Financial Accounting Standards Board (**FASB**) issued Accounting Standards Update (**ASU**) No. 2015-03, *Simplifying the Presentation of Debt Issuance Costs* (**ASU 2015-03**), which requires debt issuance costs related to a recognized debt liability to be presented on the balance sheet as a reduction of debt, similar to the presentation of debt discounts. For public entities, ASU 2015-03 was effective for annual reporting periods beginning after December 15, 2015. We adopted ASU 2015-03 on January 1, 2016 and, accordingly, deferred financing costs are presented as a reduction of debt in our December 31, 2016 and 2015 consolidated balance sheets. Prior to the adoption of ASU 2015-03, we presented deferred financing costs in other assets: amounts recoverable in more than one year.

Recent Accounting Pronouncements

ASU 2014-09

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 guidance when it becomes effective for annual and interim reporting periods beginning after December 15, 2017. 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 using the cumulative effect transition method. While we are continuing to evaluate the effect that ASU 2014-09 will have on our consolidated financial statements, we have identified a number of our current revenue recognition policies that will be impacted by ASU 2014-09, including the accounting for (i) time-limited discounts and free periods provided to our customers and (ii) certain up-front fees charged to our customers. These impacts are discussed below:

- When we enter into contracts to provide services to our customers, we often provide time-limited discounts or free service periods. Under current accounting rules, we recognize revenue net of discounts during the promotional periods and do not recognize any revenue during free service periods. Under ASU 2014-09, revenue recognition will be accelerated for these contracts as the impact of the discount or free service period will be recognized uniformly over the total contractual period.

- When we enter into contracts to provide services to our customers, we often charge installation or other up-front fees. Under current accounting rules, installation fees related to services provided over our cable networks are 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. Under ASU 2014-09, these fees will generally be deferred and recognized as revenue over the contractual period, or longer if the up-front fee results in a material renewal right.

As the above revenue recognition changes have offsetting impacts and both result in a relatively minor shift in the timing of revenue recognition, we currently do not expect ASU 2014-09 to have a material impact on our reported revenue.

ASU 2014-09 will also impact our accounting for certain upfront costs directly associated with obtaining and fulfilling customer contracts. Under our current policy, these costs are expensed as incurred unless the costs are in the scope of another accounting topic that allows for capitalization. Under ASU 2014-09, the upfront costs that are currently expensed as incurred will be recognized as assets and amortized to other operating expenses over a period that is consistent with the transfer to the customers of the goods or services to which the assets relate, which we have generally interpreted to be the expected customer life. The impact of the accounting change for these costs will be dependent on numerous factors, including the number of new subscriber contracts added in any given period, but we expect the adoption of this accounting change will initially result in the deferral of a significant amount of operating and selling costs.

The ultimate impact of adopting ASU 2014-09 for both revenue recognition and costs to obtain and fulfill contracts will depend on the promotions and offers in place during the period leading up to and after the adoption of ASU 2014-09.

ASU 2016-02

In February 2016, the FASB issued ASU No. 2016-02, *Leases* (**ASU 2016-02**), which, for most leases, will result in lessees recognizing lease assets and lease liabilities on the balance sheet with additional disclosures about leasing arrangements. ASU 2016-02 requires lessees and lessors to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. The modified retrospective approach also includes a number of optional practical expedients an entity may elect to apply. ASU 2016-02 is effective for annual reporting periods beginning after December 15, 2018, including interim periods within those fiscal years, with early adoption permitted. Although we are currently evaluating the effect that ASU 2016-02 will have on our consolidated financial statements, we expect the adoption of this standard will increase the number of leases to be accounted for as capital leases in our consolidated balance sheet.

ASU 2016-09

In March 2016, the FASB issued ASU No. 2016-09, *Compensation — Stock Compensation, Improvements to Employee Share-Based Payment Accounting* (**ASU 2016-09**), which simplifies several aspects of the accounting for share-based payment transactions, including income tax consequences, classification of awards as either equity or liabilities and classification within the statement of cash flows. ASU 2016-09 is effective for annual reporting periods beginning after December 15, 2016, including interim periods within those fiscal years, with early adoption permitted. ASU 2016-09 will result in, among other matters, the immediate recognition for financial reporting purposes of excess tax benefits that currently are not recognized until such time as these tax benefits can be realized as a reduction of income taxes payable.

ASU 2017-04

In January 2017, the FASB issued ASU No. 2017-04, *Simplifying the Test for Goodwill Impairment* (**ASU 2017-04**), which eliminates the requirement to estimate the implied fair value of a reporting unit's goodwill as determined following the procedure that would be required in determining the fair value of assets acquired and liabilities assumed in a business combination. Instead, a company should recognize any goodwill impairment by comparing the fair value of a reporting unit to its carrying amount. ASU 2017-04 is effective for annual reporting periods beginning after December 15, 2019, including interim periods within those fiscal years, with early adoption permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. We expect the adoption of ASU 2017-04 to reduce the complexity surrounding the evaluation of our goodwill for impairment.

(3) Summary of Significant Accounting Policies

Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the U.S. (**U.S. 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, including the reclassification of deferred financing costs from other long-term assets to long-term debt and the reclassification of certain costs between programming and other direct costs of services, other operating and SG&A expenses. For additional information regarding the change in the classification of deferred financing costs, see *"Accounting Changes"* in note 2.

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, 2016 and 2015, our current and long-term restricted cash balances aggregated $39.1 million and $127.9 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 $193.4 million and $115.7 million at December 31, 2016 and 2015, 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 gains or losses due to changes in fair values of certain investments and debt, 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 our 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.

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.

Dividends from publicly-traded investees that are not accounted for under the equity method are recognized when declared as dividend income in our consolidated statements of operations. Dividends from our equity method investees and all of our privately-held investees are reflected as reductions of the carrying values of the applicable investments. Dividends that are deemed to be (i) returns on our investments are included in cash flows from operating activities in our consolidated statements of cash flows and (ii) returns of our investments are included in cash flows from investing activities in our consolidated statements of cash flows.

We continually review all of our equity and cost 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 or cost 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 and other accrued and current liabilities, their respective carrying values approximate their respective fair values. For information concerning the fair values of certain of our investments, derivatives and debt, see notes 6, 7 and 10, respectively. For information regarding 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 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.

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 in our consolidated statement of cash flows.

For information regarding our derivative instruments, 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 and mobile 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 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. 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 lives of cable and mobile 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, 2016 and 2015, the recorded value of our asset retirement obligations was $96.3 million and $63.9 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 are initially 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 cable television 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

When circumstances warrant, we review 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 recorded at the lower of their carrying amount or fair value less costs to sell.

We evaluate goodwill and other indefinite-lived intangible assets (primarily cable television franchise rights) for impairment at least annually on October 1 and whenever facts and circumstances indicate that their carrying amounts 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"). 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 other indefinite-lived intangible assets, if it is more-likely-than-not that the fair value of an indefinite-lived intangible asset is less than its carrying value, we then estimate its fair value and any excess of the carrying value over the fair value 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. 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. Interest and penalties related to income tax liabilities are included in income tax benefit or 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.

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 most of our 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. 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 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 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.

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-based 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 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.

The grant date fair values for options, share appreciation rights (**SARs**) and performance-based share appreciation rights (**PSARs**) are estimated using the Black-Scholes option pricing model, and the grant date fair values for restricted share units (**RSUs**) and performance-based restricted share units (**PSUs)** are based upon the closing share price of Liberty Global ordinary shares on the date of grant. We calculate the expected life of options and SARs granted by Liberty Global to employees based on historical exercise trends. The expected volatility for options and SARs related to Liberty Global Shares is generally based on a combination of (i) historical volatilities of Liberty Global Shares for a period equal to the expected average life of the awards and (ii) volatilities implied from publicly-traded options for Liberty Global Shares. The expected volatility for options and SARs related to LiLAC Shares is generally based on a combination of (a) historical volatilities of LiLAC Shares for a period equal to the expected average life of the award and, if this data is unavailable, historical volatilities of ordinary shares of a relevant peer group for a period equal to the expected average life of the award, and (b) volatilities implied from publicly-traded options for LiLAC Shares where available.

We generally issue new Liberty Global ordinary shares when Liberty Global options or SARs are exercised and when RSUs and PSUs 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 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, PSARs, 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,		
	2016	2015	2014
		in millions	
Net earnings (loss) attributable to holders of:			
Liberty Global Shares (a)	$ 1,941.1	$ (167.5)	$ —
LiLAC Shares (a)	(235.8)	17.2	—
Old Liberty Global Shares (b):			
Loss from continuing operations	—	(1,002.2)	(1,028.5)
Earnings from discontinued operation	—	—	333.5
	—	(1,002.2)	(695.0)
Net earnings (loss) attributable to Liberty Global shareholders	$ 1,705.3	$ (1,152.5)	$ (695.0)

(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.

The details of our weighted average shares outstanding are set forth below:

	Year ended December 31,		
	2016	2015	2014
Weighted average shares outstanding:			
Liberty Global Shares (a):			
Basic	889,790,968	864,721,483	
Diluted	899,969,654	864,721,483	
LiLAC Shares (a):			
Basic	110,868,650	43,915,757	
Diluted	110,868,650	44,235,275	
Old Liberty Global Shares — basic and diluted (b)		884,040,481	798,869,761

(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 amount presented for the year ended December 31, 2015 relates to the period from January 1, 2015 through June 30, 2015.

***Liberty Global Shares**.*

The details of the calculation of EPS with respect to Liberty Global Shares for the year ended December 31, 2016 are set forth in the table below:

Numerator:	
Net earnings attributable to holders of Liberty Global Shares (basic EPS computation) (in millions)	$ 1,941.1
Interest expense on Virgin Media's 6.50% convertible senior notes	1.7
Net earnings attributable to holders of Liberty Global Shares (diluted EPS computation) (in millions)	$ 1,942.8
Denominator:	
Weighted average ordinary shares (basic EPS computation)	889,790,968
Incremental shares attributable to the assumed exercise of outstanding options, SARs and PSARs and the release of share units upon vesting (treasury stock method)	7,819,514
Virgin Media's 6.50% convertible senior notes	2,359,172
Weighted average ordinary shares (diluted EPS computation)	899,969,654

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**.*

We reported a loss attributable to holders of LiLAC Shares during the year ended December 31, 2016. Therefore, the potentially dilutive effect at December 31, 2016 of the following items was not included in the computation of diluted loss per share attributable to holders of LiLAC 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 RSUs of approximately 7.5 million and (ii) the aggregate number of shares issuable pursuant to outstanding PSUs and PGUs of approximately 1.1 million.

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

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 year ended December 31, 2014. Therefore, the potentially dilutive effect at June 30, 2015 and December 31, 2014 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 outstanding RSUs of approximately 42.1 million and 39.1 million, respectively, (ii) the aggregate number of shares issuable pursuant to PSUs and PGUs of approximately 5.3 million and 5.4 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.

(4) Acquisitions

Pending Acquisitions

SFR BeLux. On December 22, 2016, a subsidiary of Telenet entered into a definitive agreement to acquire Coditel Brabant sprl, operating under the SFR brand (**SFR BeLux**), for €400.0 million ($421.9 million) on a cash and debt free basis. SFR BeLux provides cable services to households and businesses in Brussels, Wallonia and Luxembourg and offers mobile services in Belgium through a mobile virtual network operator (**MVNO**) agreement with BASE, as defined and described below. Telenet intends to finance the acquisition of SFR BeLux through a combination of existing cash and cash equivalents and available liquidity under its revolving credit facilities. The transaction is subject to customary closing conditions, including approval from the relevant competition authorities, and is expected to close during the second half of 2017.

Multimedia. On October 18, 2016, our subsidiary UPC Polska SP Z.o.o. entered into a definitive agreement to acquire the cable business of Multimedia Polska S.A. (**Multimedia**), the third-largest cable operator in Poland, for cash consideration of PLN 3.0 billion ($718.2 million), which is equal to the enterprise value assigned to Multimedia for purposes of this transaction. We intend to finance the acquisition of Multimedia with existing liquidity. The final purchase price is subject to potential downward adjustments for the operational and financial performance of Multimedia prior to closing. The transaction is subject to customary closing conditions, including regulatory approval, and is expected to close in late 2017 or early 2018.

2016 Acquisitions

CWC. On May 16, 2016, we acquired CWC for shares of Liberty Global (the **CWC Acquisition**). Under the terms of the transaction, CWC shareholders received in the aggregate: 31,607,008 Class A Liberty Global Shares, 77,379,774 Class C Liberty Global Shares, 3,648,513 Class A LiLAC Shares and 8,939,316 Class C LiLAC Shares. Further, immediately prior to the acquisition, CWC declared a special cash dividend (the **Special Dividend**) to its shareholders in the amount of £0.03 ($0.04 at the transaction date) per CWC share. The Special Dividend was paid to CWC shareholders promptly following the closing and the payment, together with fees and expenses related to the acquisition, was funded with CWC liquidity, including incremental debt borrowings, and LiLAC Group corporate liquidity. We acquired CWC in order to achieve certain financial, operational and strategic benefits through the integration of CWC with our existing operations in the LiLAC Group.

The CWC Acquisition triggered regulatory approval requirements in certain jurisdictions in which CWC operates. The regulatory authorities in certain of these jurisdictions, including the Bahamas, Jamaica, Trinidad and Tobago, the Seychelles and the Cayman Islands, have not completed their review of the CWC Acquisition or granted their approval. While we expect to receive all outstanding approvals, such approvals may include binding conditions or requirements that could have an adverse impact on CWC's operations and financial condition.

For accounting purposes, the CWC Acquisition was treated as the acquisition of CWC by Liberty Global. In this regard, the equity and cash consideration paid to acquire CWC is set forth below (in millions):

Class A Liberty Global Shares (a)	$ 1,167.2
Class C Liberty Global Shares (a)	2,803.5
Class A LiLAC Shares (a)	144.1
Class C LiLAC Shares (a)	375.3
Special Dividend (b)	193.8
Total	$ 4,683.9

(a) Represents the fair value of the 31,607,008 Class A Liberty Global Shares, 77,379,774 Class C Liberty Global Shares, 3,648,513 Class A LiLAC Shares and 8,939,316 Class C LiLAC Shares issued to CWC shareholders in connection with the CWC Acquisition. These amounts are based on the market price per share at closing on May 16, 2016 of $36.93, $36.23, $39.50 and $41.98, respectively.

(b) Represents the Special Dividend of £0.03 ($0.04 at the transaction date) per CWC share paid pursuant to the scheme of arrangement based on 4,433,222,313 outstanding shares of CWC on May 16, 2016.

We have accounted for the CWC Acquisition using the acquisition method of accounting, whereby the total purchase price was allocated to the acquired identifiable net assets of CWC 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. 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, customer relationships, trademarks, noncontrolling interests and income taxes. A summary of the purchase price and the preliminary opening balance sheet of CWC at the May 16, 2016 acquisition date is presented in the following table (in millions):

Cash and cash equivalents	$ 210.8
Other current assets	583.2
Property and equipment, net	2,908.1
Goodwill (a)	5,544.3
Intangible assets subject to amortization, net (b)	1,266.0
Other assets, net	579.2
Current portion of debt and capital lease obligations	(94.2)
Other accrued and current liabilities	(750.1)
Long-term debt and capital lease obligations	(3,308.0)
Other long-term liabilities	(803.6)
Noncontrolling interests (c)	(1,451.8)
Total purchase price (d)	$ 4,683.9

(a) The goodwill recognized in connection with the CWC Acquisition is primarily attributable to (i) the ability to take advantage of CWC's existing terrestrial and sub-sea networks to gain immediate access to potential customers and (ii) synergies that are expected to be achieved through the integration of CWC with other operations in the LiLAC Group.

(b) Amount primarily includes intangible assets related to customer relationships. At May 16, 2016, the preliminary assessment of the weighted average useful life of CWC's intangible assets was approximately eight years.

(c) Represents the estimated aggregate fair value of the noncontrolling interests in CWC's subsidiaries as of May 16, 2016.

(d) Excludes direct acquisition costs of $132.0 million, including $118.5 million incurred during 2016, which are included in impairment, restructuring and other operating items, net, in our consolidated statements of operations.

Following completion of the CWC Acquisition, we attributed CWC to the LiLAC Group, with the Liberty Global Group being granted an inter-group interest in the LiLAC Group representing the fair value (as determined by our board of directors) of the Liberty Global Shares issued as part of the purchase consideration. On July 1, 2016, we distributed (as a bonus issue) 117,430,965 LiLAC Shares to Liberty Global Group shareholders on a pro-rata basis (the **LiLAC Distribution**), thereby eliminating the Liberty Global Group's inter-group interest in the LiLAC Group. The LiLAC Distribution was accounted for prospectively effective July 1, 2016.

BASE. On February 11, 2016, Telenet acquired Telenet Group BVBA, formerly known as BASE Company NV (**BASE**), for a cash purchase price of €1,318.9 million ($1,494.3 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. The acquisition was approved by the European Commission subject to Telenet's agreement to divest both the JIM Mobile prepaid customer base and BASE's 50% stake in Viking Co NV (**Viking**) to MEDIALAAN NV. In February 2016, Telenet completed the sale of its stake in Viking. The divestiture of the JIM Mobile prepaid customer base is expected to occur during the third quarter of 2017.

We have accounted for the BASE Acquisition using the acquisition method of accounting, whereby the total purchase price was allocated to the acquired identifiable net assets of BASE 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 opening balance sheet of BASE at the February 11, 2016 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	$ 160.1
Other current assets	148.3
Property and equipment, net	811.4
Goodwill (a)	330.7
Intangible assets subject to amortization, net:	
Mobile spectrum (b)	261.0
Customer relationships (c)	115.0
Trademarks (d)	40.7
Other assets, net	10.5
Other accrued and current liabilities	(290.0)
Other long-term liabilities	(93.4)
Total purchase price (e)	$ 1,494.3

____

(a) The goodwill recognized in connection with the BASE Acquisition is primarily attributable to (i) the ability to take advantage of BASE's existing mobile network to gain immediate access to potential customers and (ii) synergies that are expected to be achieved through the integration of BASE with Telenet.

(b) As of February 11, 2016, the weighted average useful life of BASE's mobile spectrum was approximately 11 years.

(c) As of February 11, 2016, the weighted average useful life of BASE's customer relationships was approximately seven years.

(d) As of February 11, 2016, the weighted average useful life of BASE's trademarks was approximately 20 years.

(e) Excludes direct acquisition costs of $17.1 million, including $7.1 million incurred during 2016, which are included in impairment, restructuring and other operating items, net, in our consolidated statements of operations.

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.

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 opening balance sheet of Choice at the June 3, 2015 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	$ 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
Cable television 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.

(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 statements 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 then-existing operations in the Netherlands and our other European operations.

On December 31, 2016, our operations in the Netherlands were contributed to the Dutch JV, as defined and described in note 5.

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 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 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

____

(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.

(b) Represents the cash consideration paid in connection with the Ziggo Acquisition.

(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.

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 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 was 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 were expected to be achieved through the integration of Ziggo with our then-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

____

(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.

Pro Forma Information

In pro forma tables presented below, 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 or loss and basic and diluted earnings or loss per share attributed to (i) Liberty Global Shares, (ii) LiLAC Shares and (iii) Old Liberty Global Shares only includes the results of operations for the periods during which these shares were outstanding. Accordingly, (a) our net earnings or loss attributed to Liberty Global Shares and LiLAC Shares relates to periods subsequent to July 1, 2015 and (b) our net loss attributed to Old Liberty Global Shares relates to periods prior to July 1, 2015.

The following unaudited pro forma consolidated operating results give effect to (i) the CWC Acquisition, (ii) the BASE Acquisition and (iii) the Choice Acquisition, as if they had been completed as of January 1, 2015. 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.

	Year ended December 31,	
	2016	2015
	in millions, except per share amounts	
Revenue:		
Liberty Global Group	$ 17,359.4	$ 17,743.0
LiLAC Group	3,621.2	3,642.7
Total	$ 20,980.6	$ 21,385.7
Net earnings (loss) attributable to Liberty Global shareholders:		
Liberty Global Shares	$ 1,937.6	$ (127.7)
LiLAC Shares	53.6	(89.1)
Old Liberty Global Shares	—	(1,230.6)
Total	$ 1,991.2	$ (1,447.4)
Basic and diluted earnings (loss) attributable to Liberty Global shareholders per share:		
Liberty Global Shares		
Basic	$ 2.08	$ (0.13)
Diluted	$ 2.06	$ (0.13)
LiLAC Shares		
Basic and diluted	$ 0.46	$ (1.57)
Old Liberty Global Shares		
Basic and diluted		$ (1.24)

Our consolidated statement of operations for 2016 includes revenue and net loss of (i) $1,443.6 million and $30.4 million, respectively, attributable to CWC and (ii) $597.1 million and $2.1 million, respectively, attributable to BASE.

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.

	Year ended December 31,	
	2015	**2014**
	in millions, except per share amounts	
Revenue:		
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. 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) Dutch JV Transaction and Discontinued Operation

Dutch JV Transaction

On December 31, 2016, pursuant to a Contribution and Transfer Agreement with Vodafone Group plc (**Vodafone**) and one of its wholly-owned subsidiaries, we and Liberty Global Europe Holding B.V., our wholly-owned subsidiary, contributed Ziggo Group Holding and its subsidiaries (including Liberty Global Netherlands Content B.V., referred to herein as "**Ziggo Sport**") to VodafoneZiggo Group Holding B.V., a newly-formed 50:50 joint venture (referred to herein as the "**Dutch JV**"). Ziggo Sport, which became a subsidiary of Ziggo Group Holding during the fourth quarter of 2016, operates premium sports channels in the Netherlands. The Dutch JV combined Ziggo Group Holding with Vodafone's mobile businesses in the Netherlands (**Vodafone NL**) to create a national unified communications provider in the Netherlands with complementary strengths across video, broadband, mobile and B2B services (the **Dutch JV Transaction**). As a result of the Dutch JV Transaction, effective December 31, 2016 we no longer consolidate Ziggo Group Holding. For additional information regarding our investment in the Dutch JV, see note 6.

On January 4, 2017, in connection with the completion of the Dutch JV Transaction, our company received cash of €2.2 billion ($2.3 billion at the transaction date) comprising (i) our 50% share of the €2.8 billion ($2.9 billion at the transaction date) of net proceeds from the various debt financing arrangements entered into by certain subsidiaries of Ziggo Group Holding during the third quarter of 2016, which proceeds were held in escrow through December 31, 2016, and (ii) an equalization payment from

Vodafone of €802.9 million ($840.8 million at the transaction date) that is subject to post-closing adjustments. Our right to receive this cash is reflected in our December 31, 2016 consolidated balance sheet as a current receivable from the Dutch JV.

In connection with the Dutch JV Transaction, we recognized a pre-tax gain of $520.8 million, net of the recognition of a cumulative foreign currency translation loss of $714.5 million. This gain, which was calculated by deducting the carrying value of Ziggo Group Holding (including the related foreign currency translation loss) from the sum of (i) the fair value assigned to our 50% interest in the Dutch JV and (ii) the cash received pursuant to the equalization payment, includes $260.4 million related to the remeasurement of our retained investment in Ziggo Group Holding. For information regarding our approach to the valuation of our interest in the Dutch JV, see note 8.

Our consolidated statements of operations include aggregate earnings (loss) before income taxes attributable to Ziggo Group Holding and Ziggo Sport of ($276.4 million), ($534.5 million) and $270.2 million during 2016, 2015 and 2014, respectively. The December 31, 2016 carrying amounts of the major classes of assets and liabilities associated with Ziggo Group Holding, which was contributed into the Dutch JV, are summarized below (in millions):

Assets:		
Cash and cash equivalents	$	6.1
Current restricted cash		3,144.0
Current assets other than cash		259.0
Property and equipment, net		3,201.2
Goodwill		7,637.2
Intangible assets subject to amortization, net		3,406.7
Other assets, net		578.8
Total assets	$	18,233.0
Liabilities:		
Current portion of debt and capital lease obligations	$	290.3
Other accrued and current liabilities		2,396.4
Long-term debt and capital lease obligations		11,812.8
Other long-term liabilities		991.7
Total liabilities	$	15,491.2

Discontinued Operation

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. 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.

The operating results of the Chellomedia Disposal Group are classified as a discontinued operation in our consolidated statement of operations and are summarized in the following table:

	Year ended December 31, 2014 (a) (b)
	in millions
Revenue	$ 26.6
Operating income	$ 0.6
Earnings before income taxes and noncontrolling interests	$ 0.9
Income tax expense	$ (0.1)
Earnings from discontinued operation attributable to Liberty Global shareholders, net of taxes	$ 0.8

(a) Includes the operating results of the Chellomedia Disposal Group through January 31, 2014, the date the Chellomedia Disposal Group was sold.

(b) Excludes the Chellomedia Disposal Group's intercompany revenue and expenses that are eliminated within Liberty Global's consolidated financial statements.

(6) Investments

The details of our investments are set forth below:

Accounting Method	December 31, 2016	December 31, 2015
	in millions	
Equity:		
Dutch JV (a)	$ 4,186.6	$ —
Other	142.7	247.4
Total — equity	4,329.3	247.4
Fair value:		
ITV — subject to re-use rights	1,015.4	1,624.1
Sumitomo	538.4	471.1
ITI Neovision	129.3	120.0
Lionsgate	128.6	162.0
Other	245.5	214.6
Total — fair value	2,057.2	2,591.8
Cost	97.2	0.4
Total	$ 6,483.7	$ 2,839.6

(a) The 2016 amount includes a $1,054.7 million related-party loan from a subsidiary of Liberty Global to a subsidiary of the Dutch JV (the **Dutch JV Loan Receivable**). The Dutch JV Loan Receivable bears interest at 5.55% and matures on January 16, 2027.

Equity Method Investments

Dutch JV. On December 31, 2016, we completed the Dutch JV Transaction. Each of Liberty Global and Vodafone (each a "**Shareholder**") holds 50% of the issued share capital of the Dutch JV. The Shareholders intend for the Dutch JV to be funded solely from its net cash flow from operations and third-party financing. We account for our 50% interest in the Dutch JV, which has been attributed to the Liberty Global Group, as an equity method investment. We consider the Dutch JV to be a related party. For additional information regarding the formation of the Dutch JV, see note 5.

In connection with the formation of the Dutch JV, the Shareholders entered into a shareholders agreement (the **Shareholders Agreement**). The Shareholders Agreement contains customary provisions for the governance of a 50:50 joint venture that result in Liberty Global and Vodafone having joint control over decision making with respect to the Dutch JV.

The Shareholders Agreement also provides (i) for a dividend policy that requires the Dutch JV to distribute all unrestricted cash to the Shareholders every two months (subject to the Dutch JV maintaining a minimum amount of cash and complying with the terms of its financing arrangements) and (ii) that the Dutch JV will be managed with a leverage ratio of between 4.5 and 5.0 times EBITDA (as calculated pursuant to its existing financing arrangements) with the Dutch JV undertaking periodic recapitalizations and/or refinancings accordingly.

Each Shareholder has the right to initiate an initial public offering (**IPO**) of the Dutch JV after the third anniversary of the closing, with the opportunity for the other Shareholder to sell shares in the IPO on a pro rata basis. Subject to certain exceptions, the Shareholders Agreement prohibits transfers of interests in the Dutch JV to third parties until the fourth anniversary of the closing. After the fourth anniversary, each Shareholder will be able to initiate a sale of all of its interest in the Dutch JV to a third party and, under certain circumstances, initiate a sale of the entire Dutch JV; subject, in each case, to a right of first offer in favor of the other Shareholder.

Pursuant to an agreement entered into in connection with the closing of the Dutch JV (the **Framework Agreement**), Liberty Global will provide certain services to the Dutch JV on a transitional or ongoing basis (collectively, the **Dutch JV Services**). Pursuant to the terms of the Framework Agreement, the ongoing services will be provided for a period of four to six years depending on the type of service, while transitional services will be provided for a period of not less than 12 months after which both parties shall be entitled to terminate based on specified notice periods. The Dutch JV Services provided by Liberty Global will consist primarily of (i) technology and other services and (ii) capital-related expenditures for assets that will be used by or will otherwise benefit the Dutch JV. Liberty Global will charge both fixed and variable fees to the Dutch JV for the Dutch JV Services it provides during the term of the Framework Agreement, including estimated total fees of approximately €120 million ($127 million) during 2017 and minimum fees of approximately €100 million ($105 million) and €75 million ($79 million) during 2018 and 2019, respectively. The estimated fees for the Dutch JV Services during 2017 include approximately €23 million ($24 million) of costs that were related to goods and services that were centrally purchased by a Liberty Global corporate subsidiary and passed through to our Netherlands segment, which in turn reported these costs as operating expenses in 2016. Beginning in 2017, these costs will remain in Liberty Global's operating expenses and will therefore offset a portion of the fees for the Dutch JV Services. The charges for the Dutch JV Services will be included in revenue in our consolidated statement of operations.

The summarized financial condition of the Dutch JV as of December 31, 2016 is set forth below (in millions):

Current assets	$ 3,589.8
Long-term assets	20,751.0
Total assets	$ 24,340.8
Current liabilities (a)	$ 4,360.0
Long-term liabilities	14,041.8
Owners' equity	5,939.0
Total liabilities and owners' equity	$ 24,340.8

(a) Amount includes a $21.0 million payable to Liberty Global for services provided to Ziggo Group Holding through December 31, 2016. We have included the corresponding receivable amount in other assets: amounts recoverable in less than one year in our consolidated balance sheet.

Fair Value Investments

ITV. At December 31, 2016, we owned 398,515,510 shares of ITV plc (**ITV**), a commercial broadcaster in the U.K. Our ITV shares represented less than 10.0% of the total outstanding shares of ITV as of June 30, 2016, the most current publicly-available information. The aggregate purchase price paid to acquire our investment in ITV was financed through borrowings under secured borrowing agreements (the **ITV Collar Loan**). 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, 2016 and 2015, 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 September 30, 2016, the most current publicly-available information. These shares secure the Sumitomo Collar Loan and the Sumitomo Share Loan, each as defined and described in note 7.

ITI Neovision. At December 31, 2016 and 2015, we owned a 17.0% interest in ITI Neovision S.A. (**ITI Neovision)**, a privately-held direct-to-home (**DTH**) operator in Poland.

Lionsgate. On November 12, 2015, we acquired an aggregate of 5.0 million shares of Lions Gate Entertainment Corp. (**Lionsgate**) common stock, 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. On December 8, 2016, Lionsgate acquired Starz, LLC in a cash and stock transaction. Under the terms of the transaction, the existing share capital of Lionsgate was restructured such that each share of previously-existing Lionsgate common stock was converted into 0.5 newly-issued voting shares and 0.5 newly-issued non-voting shares. As a result, our original 5.0 million shares of Lionsgate were converted into 2.5 million shares of Lionsgate voting stock and 2.5 million shares of Lionsgate non-voting stock. The terms of the Lionsgate Forward were also amended to include both classes of shares. Our Lionsgate shares represented less than 5% of the total outstanding shares of Lionsgate as of November 1, 2016, the most current publicly available information. For additional information regarding the Lionsgate Forward, see note 7.

(7) Derivative Instruments

In general, we seek to enter into derivative instruments to protect against (i) increases in the interest rates on our variable-rate debt, (ii) foreign currency movements, particularly with respect to borrowings that are denominated in a currency other than the functional currency of the borrowing entity and (iii) decreases in the market prices of certain publicly traded securities that we own. 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**), Indian rupee (**INR**), the Jamaican dollar (**JMD**), the Philippine peso (**PHP**), the the Polish zloty (**PLN**) and the Romanian lei (**RON**).

The following table provides details of the fair values of our derivative instrument assets and liabilities:

	December 31, 2016			December 31, 2015		
	Current (a)	Long-term (a)	Total	Current (a)	Long-term (a)	Total
	in millions					
Assets:						
Cross-currency and interest rate derivative contracts:						
Liberty Global Group	$ 337.5	$ 2,123.1	$ 2,460.6	$ 263.6	$ 1,518.5	$ 1,782.1
LiLAC Group	6.9	139.0	145.9	11.8	291.7	303.5
Total cross-currency and interest rate derivative contracts (b)	344.4	2,262.1	2,606.5	275.4	1,810.2	2,085.6
Equity-related derivative instruments - Liberty Global Group (c)	37.1	486.9	524.0	135.5	273.0	408.5
Foreign currency forward and option contracts:						
Liberty Global Group	30.7	14.1	44.8	6.2	—	6.2
LiLAC Group	0.3	—	0.3	4.2	—	4.2
Total foreign currency forward and option contracts	31.0	14.1	45.1	10.4	—	10.4
Other - Liberty Global Group	0.2	0.3	0.5	0.6	1.0	1.6
Total assets:						
Liberty Global Group	405.5	2,624.4	3,029.9	405.9	1,792.5	2,198.4
LiLAC Group	7.2	139.0	146.2	16.0	291.7	307.7
Total	$ 412.7	$ 2,763.4	$ 3,176.1	$ 421.9	$ 2,084.2	$ 2,506.1
Liabilities:						
Cross-currency and interest rate derivative contracts:						
Liberty Global Group	$ 239.1	$ 999.6	$ 1,238.7	$ 304.9	$ 1,194.7	$ 1,499.6
LiLAC Group	24.6	28.9	53.5	—	13.8	13.8
Total cross-currency and interest rate derivative contracts (b)	263.7	1,028.5	1,292.2	304.9	1,208.5	1,513.4
Equity-related derivative instruments - Liberty Global Group (c)	8.6	—	8.6	34.7	39.7	74.4
Foreign currency forward contracts:						
Liberty Global Group	4.7	0.1	4.8	1.1	—	1.1
LiLAC Group	4.2	—	4.2	—	—	—
Total foreign currency forward and option contracts	8.9	0.1	9.0	1.1	—	1.1
Other - Liberty Global Group	—	0.1	0.1	5.6	0.1	5.7
Total liabilities:						
Liberty Global Group	252.4	999.8	1,252.2	346.3	1,234.5	1,580.8
LiLAC Group	28.8	28.9	57.7	—	13.8	13.8
Total	$ 281.2	$ 1,028.7	$ 1,309.9	$ 346.3	$ 1,248.3	$ 1,594.6

(a) Our current derivative liabilities, long-term derivative assets and long-term derivative liabilities are included in other accrued and current liabilities, other assets: amounts recoverable in more than one year, and other non-current liabilities, respectively, in our consolidated balance sheets.

(b) We consider credit risk in our fair value assessments. As of December 31, 2016 and 2015, (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 $93.1 million and $64.0 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 $71.5 million and $86.5 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 losses of $16.4 million, $9.3 million and $120.9 million during 2016, 2015 and 2014, respectively. These amounts are included in gains 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 primarily include the fair value of (i) the ITV Collar (ii) the share collar with respect to the shares of Sumitomo held by our company (the **Sumitomo Collar**), (iii) the Lionsgate Forward and (iv) at December 31, 2015, Virgin Media's conversion hedges with respect to Virgin Media's 6.50% convertible senior notes (the **Virgin Media Capped Calls**). The fair values of the ITV Collar, the Sumitomo Collar and the Lionsgate Forward 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 gains on derivative instruments, net, are as follows:

	Year ended December 31,		
	2016	2015	2014
		in millions	
Cross-currency and interest rate derivative contracts:			
Liberty Global Group	$ 716.2	$ 855.7	$ 252.5
LiLAC Group	(216.8)	217.0	41.1
Total cross-currency and interest rate derivative contracts	499.4	1,072.7	293.6
Equity-related derivative instruments - Liberty Global Group:			
ITV Collar	351.5	(222.6)	(77.4)
Sumitomo Collar	(25.6)	(20.3)	(46.0)
Lionsgate Forward	10.1	14.5	—
Ziggo Collar (a)	—	—	(113.3)
Other	1.6	0.7	0.4
Total equity-related derivative instruments	337.6	(227.7)	(236.3)
Foreign currency forward and option contracts:			
Liberty Global Group	18.1	(9.0)	29.0
LiLAC Group	(9.1)	10.3	2.6
Total foreign currency forward contracts	9.0	1.3	31.6
Other - Liberty Global Group	(0.9)	0.9	(0.1)
Total Liberty Global Group	1,071.0	619.9	45.1
Total LiLAC Group	(225.9)	227.3	43.7
Total	$ 845.1	$ 847.2	$ 88.8

(a) Upon completion of the Ziggo Acquisition, the Ziggo Collar (as defined and described below) was terminated.

The following table sets forth the classification of the net cash inflows (outflows) of our derivative instruments:

	Year ended December 31,		
	2016	2015	2014
		in millions	
Operating activities:			
Liberty Global Group	$ 47.9	$ (225.9)	$ (425.2)
LiLAC Group	(6.1)	(28.8)	(20.5)
Total operating activities	41.8	(254.7)	(445.7)
Investing activities:			
Liberty Global Group	(2.9)	15.6	(30.2)
LiLAC Group	(3.4)	2.2	—
Total investing activities	(6.3)	17.8	(30.2)
Financing activities:			
Liberty Global Group	(251.5)	(301.2)	(183.6)
LiLAC Group	—	—	(37.4)
Total financing activities	(251.5)	(301.2)	(221.0)
Total cash outflows:			
Liberty Global Group	(206.5)	(511.5)	(639.0)
LiLAC Group	(9.5)	(26.6)	(57.9)
Total	$ (216.0)	$ (538.1)	$ (696.9)

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. With the exception of a limited number of instances where we have required a counterparty to post collateral, neither party has posted collateral under the derivative instruments of our subsidiary borrowing groups. At December 31, 2016, our exposure to counterparty credit risk included derivative assets with an aggregate fair value of $2,424.6 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.

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, 2016, we present a single date that represents the applicable final maturity date. For derivative instruments that become effective subsequent to December 31, 2016, 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, 2016 are as follows:

Subsidiary / Final maturity date	Notional amount due from counterparty	Notional amount due to counterparty	Interest rate due from counterparty	Interest rate due to (from) counterparty
	in millions			
Virgin Media Investment Holdings Limited (**VMIH**), a subsidiary of Virgin Media:				
January 2023	$ 400.0	€ 339.6	5.75%	4.33%
January 2025	$ 1,855.0	£ 1,231.6	6 mo. LIBOR + 2.75%	6 mo. GBP LIBOR + 3.27%
January 2023	$ 1,000.0	£ 648.6	5.25%	5.32%
January 2025	$ 970.0	£ 742.6	6 mo. LIBOR + 2.75%	4.68%
August 2024	$ 750.0	£ 527.0	5.50%	5.46%
February 2022 (a)	$ 688.6	£ 429.0	4.93%	5.39%
April 2023 (a)	$ 480.0	£ 299.1	1.55%	1.78%
February 2022 - April 2023	$ 475.0	£ 295.6	4.88%	5.32%
October 2022	$ 450.0	£ 272.0	6.00%	6.43%
January 2021	$ 447.9	£ 276.7	5.25%	6 mo. GBP LIBOR + 2.06%
January 2022 - January 2025	$ 425.0	£ 255.8	3 mo. LIBOR	4.86%
January 2022	$ 425.0	£ 255.8	5.50%	4.86%
January 2025	$ 383.5	£ 239.5	6 mo. LIBOR + 2.75%	5.56%
April 2019	$ 191.5	£ 122.3	6 mo. LIBOR + 2.75%	4.45%
April 2019 - January 2025	$ 191.5	£ 122.3	6 mo. LIBOR + 2.75%	5.43%
October 2019	$ 100.0	£ 65.4	7.19%	7.23%
October 2019 - October 2022	$ 50.0	£ 30.7	6.00%	5.75%
October 2019 - April 2023	$ 50.0	£ 30.3	6.38%	6.84%

Subsidiary / Final maturity date	Notional amount due from counterparty		Notional amount due to counterparty		Interest rate due from counterparty	Interest rate due to (from) counterparty
	in millions					
October 2019 (a)	£	30.3	$	50.0	2.14%	2.00%
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%
August 2024	$	412.9	€	315.8	6 mo. LIBOR + 3.00%	6 mo. EURIBOR + 3.36%
August 2024	$	325.0	€	238.7	6 mo. LIBOR + 3.00%	3.87%
January 2017 - August 2024	$	262.1	€	194.1	6 mo. LIBOR + 3.00%	6 mo. EURIBOR + 3.13%
August 2024	$	250.0	€	181.4	7.25%	7.15%
August 2024	$	225.0	CHF	206.3	6 mo. LIBOR + 3.00%	3.02%
August 2024	$	200.0	CHF	186.0	6 mo. LIBOR + 3.00%	6 mo. CHF LIBOR + 3.05%
January 2017 - July 2023	$	200.0	CHF	185.5	6 mo. LIBOR + 2.50%	6 mo. CHF LIBOR + 2.48%
August 2024	$	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 2021 - August 2024	$	100.0	CHF	92.8	6 mo. LIBOR + 3.00%	6 mo. CHF LIBOR + 2.48%
August 2024 (a)	€	379.2	$	425.0	2.45%	2.76%
September 2022	€	600.0	CHF	728.2	6 mo. EURIBOR + 2.59%	6 mo. CHF LIBOR + 2.71%
January 2020	€	460.1	CHF	566.5	9.41%	8.21%
July 2023	€	450.0	CHF	488.6	—%	(0.45)%
January 2017 - August 2024	€	383.8	CHF	477.0	6 mo. EURIBOR + 2.00%	6 mo. CHF LIBOR + 2.27%
January 2021	€	234.2	CHF	253.0	2.51%	2.22%
January 2020	€	161.0	CHF	264.0	6 mo. EURIBOR + 3.75%	6 mo. CHF LIBOR + 2.88%
August 2024	€	70.1	CHF	84.8	6 mo. EURIBOR + 2.50%	6 mo. CHF LIBOR + 3.07%
July 2023	€	56.0	CHF	62.4	6 mo. EURIBOR + 2.21%	6 mo. CHF LIBOR + 2.65%
January 2020	€	318.9	CZK	8,818.7	5.58%	5.44%
January 2022	€	99.6	CZK	2,703.1	4.51%	4.82%
December 2021	€	488.0	HUF	138,437.5	5.50%	7.39%
January 2022	€	707.0	PLN	2,999.5	5.10%	8.15%
January 2020	€	144.6	PLN	605.0	5.50%	7.98%
January 2022	€	191.0	RON	490.0	3.19%	10.94%
Unitymedia Hessen GmbH & Co. KG (**Unitymedia Hessen**), a subsidiary of Unitymedia:						
January 2023	$	2,450.0	€	1,799.0	5.62%	4.76%
Telenet International Finance S.a.r.l (**Telenet International**), a subsidiary of Telenet:						
June 2024	$	850.0	€	743.3	3 mo. LIBOR + 3.50%	3.47%

Subsidiary / Final maturity date	Notional amount due from counterparty		Notional amount due to counterparty		Interest rate due from counterparty	Interest rate due to (from) counterparty
	in millions					
January 2025	$	650.0	€	587.1	3 mo. LIBOR + 3.00%	3.16%
June 2024	€	743.3	$	850.0	0.47%	0.50%
Sable International Finance Limited (**Sable**), a subsidiary of CWC:						
December 2022	$	108.3	JMD	13,817.5	—%	8.75%
March 2019	£	146.7	$	194.3	8.63%	9.79%
VTR:						
January 2022	$	1,400.0	CLP	951,390.0	6.88%	6.36%

(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, 2016 are as follows:

Subsidiary / Final maturity date	Notional amount		Interest rate due from counterparty	Interest rate due to (from) counterparty
	in millions			
VMIH:				
October 2017	$	1,855.0	1 mo. LIBOR + 2.75%	6 mo. LIBOR + 2.47%
October 2018	£	1,198.3	6 mo. GBP LIBOR	1.52%
January 2021	£	905.1	6 mo. GBP LIBOR + 0.71%	2.37%
October 2018 - January 2025	£	858.3	6 mo. GBP LIBOR	2.41%
June 2023	£	849.4	6 mo. GBP LIBOR	1.70%
January 2021	£	628.4	5.50%	6 mo. GBP LIBOR + 1.84%
October 2018 - June 2023	£	340.0	6 mo. GBP LIBOR	2.43%
April 2023	£	108.9	6.85%	6 mo. GBP LIBOR + 5.62%
October 2022	£	51.5	6.42%	6 mo. GBP LIBOR + 5.23%
January 2025	£	33.3	6 mo. GBP LIBOR	1.37%
UPC Broadband Holding:				
January 2017 - January 2018	$	2,150.0	1 mo. LIBOR + 3.00%	6 mo. LIBOR + 2.56%
August 2024	$	425.0	6 mo. LIBOR + 5.76%	7.25%
September 2022	€	600.0	6.38%	6 mo. EURIBOR + 4.14%
January 2026 (a)	€	600.0	6 mo. EURIBOR	1.54%
September 2022	CHF	728.2	6 mo. CHF LIBOR	1.75%
August 2024	CHF	558.8	6 mo. CHF LIBOR	0.93%
July 2021 - August 2024	CHF	400.0	6 mo. CHF LIBOR	0.02%
July 2021	CHF	400.0	6 mo. CHF LIBOR	0.40%
August 2024	CHF	279.2	6 mo. CHF LIBOR + 2.85%	3.13%
January 2020	CHF	264.0	6 mo. CHF LIBOR	(0.65)%

Subsidiary / Final maturity date		Notional amount	Interest rate due from counterparty	Interest rate due to (from) counterparty
		in millions		
Unitymedia Hessen:				
January 2023	€	268.2	6 mo. EURIBOR + 4.82%	5.01%
January 2023	€	268.2	5.02%	6 mo. EURIBOR + 4.82%
Telenet International:				
December 2017 (a)	$	1,500.0	1 mo. LIBOR + 3.00%	3 mo. LIBOR + 2.83%
June 2023	€	1,300.0	3 mo. EURIBOR	0.33%
June 2023 - January 2025	€	1,093.0	3 mo. EURIBOR	1.09%
July 2017	€	800.0	3 mo. EURIBOR	(0.17)%
June 2023	€	557.0	0.04%	3 mo. EURIBOR
June 2022 - January 2025	€	475.0	3 mo. EURIBOR	0.94%
July 2017 - June 2022	€	420.0	3 mo. EURIBOR	2.08%
July 2017 - June 2023	€	382.0	3 mo. EURIBOR	1.89%
June 2022	€	55.0	3 mo. EURIBOR	1.81%
June 2023 - January 2025	€	32.0	3 mo. EURIBOR	1.10%
Sable:				
December 2017 (a)	$	1,100.0	1 mo. LIBOR + 4.75%	3 mo. LIBOR + 4.68%
December 2022	$	1,100.0	3 mo. LIBOR	1.84%
Liberty Puerto Rico:				
January 2022	$	506.3	3 mo. LIBOR	2.49%
January 2019	$	168.8	3 mo. LIBOR	1.96%

(a) Represents interest rate swap contracts in which the receivable portion of the contract has an interest rate floor.

Interest Rate Caps

Our purchased and sold interest rate cap contracts with respect to EURIBOR at December 31, 2016 are detailed below:

Subsidiary / Final maturity date		December 31, 2016	
		Notional amount	EURIBOR cap rate
		in millions	
Interest rate caps purchased:			
Virgin Media Receivables Financing PLC (a):			
October 2020	£	125.0	0.97%
Liberty Global Europe Financing B.V. (**LGE Financing**), the immediate parent of UPC Holding (b):			
January 2020	€	735.0	7.00%
Telenet International (b):			
June 2017	€	50.0	4.50%
Telenet N.V., a subsidiary of Telenet (b):			
December 2017	€	0.3	6.50%
December 2017	€	0.3	5.50%
Liberty Puerto Rico (a):			
January 2022	$	258.8	3.50%
January 2019 - July 2023	$	177.5	3.50%
Interest rate cap sold (c):			
UPC Broadband Holding:			
January 2020	€	735.0	7.00%

(a) These purchased interest rate caps entitle us to receive payments from the counterparty when the relevant LIBOR exceeds the LIBOR cap rate during the specified observation periods.

(b) These 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.

(c) 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, 2016, as detailed below:

Subsidiary / Final maturity date		December 31, 2016		
		Notional amount	EURIBOR floor rate (a)	EURIBOR cap rate (b)
		in millions		
UPC Broadband Holding:				
July 2017 - 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 comprises (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. The fair value of the ITV Collar as of December 31, 2016 was a net asset of $311.9 million, which is classified as non-current in our consolidated balance sheet. For additional information regarding our investment in ITV, see note 6. The ITV Collar has settlement dates ranging from October 2017 through May 2019.

The ITV Collar and related agreements also provide 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 our initial investment in ITV, 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 an additional investment in ITV (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, 2016, 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 maturity dates consistent with the ITV Collar 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, 2016).

Sumitomo Collar and Secured Borrowing. The Sumitomo Collar comprises purchased put options exercisable by Liberty Programming Japan LLC (**Liberty Programming Japan**), our wholly-owned subsidiary, and written call options exercisable by the counterparty with respect to a portion of the Sumitomo shares owned by Liberty Programming Japan. At December 31, 2016, the Sumitomo Collar effectively hedges the value of 27,391,305, or 60%, of our Sumitomo shares from losses due to market price decreases below the put strike price. 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 fair value of the Sumitomo Collar as of December 31, 2016 was a net asset of $179.9 million, which is classified as non-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 (the **Sumitomo Collar Loan**) are secured by 60% of our Sumitomo shares and bear interest at 1.883%. 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. Borrowings under the Sumitomo Collar Loan are included in our long-term debt in our consolidated balance sheets. For additional information, see note 10.

The Sumitomo Collar and the Sumitomo Collar Loan each mature in five equal semi-annual installments, the first and second of which became due on May 22, 2016 and November 22, 2016. In May and November 2016, Liberty Programming Japan borrowed shares of Sumitomo pursuant to a securities lending arrangement (the **Sumitomo Share Loan**) to settle the first and second installments due on the Sumitomo Collar Loan. The Sumitomo Share Loan, which we have elected to account for at fair value, bears interest at 1.10% and matures on the fifth anniversary of the respective borrowing dates. The Sumitomo Share Loan, together with the Sumitomo Collar, effectively hedge 100% of our Sumitomo shares from losses due to market price decreases. The Sumitomo Share Loan is secured by 40% of our Sumitomo shares. These shares were released from the Sumitomo Collar Loan after settlement of the first and second installments.

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 2.5 million of our 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. The fair value of the Lionsgate Forward as of December 31, 2016 was a net asset of $23.6 million, which is classified as non-current in our consolidated balance sheet. For additional information regarding our investment in Lionsgate, see note 6. The Lionsgate Forward has settlement dates ranging from July 2019 through March 2022.

The Lionsgate Forward and related agreements also provide 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, 2016, 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 maturity dates consistent with the Lionsgate Forward 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, 2016).

Ziggo Collar and Secured Borrowing. During 2013, Liberty Global Limited entered 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. 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 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 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. During 2016, the remaining outstanding notional amount of the Virgin Media Capped Calls was settled for cash proceeds of $36.2 million.

Foreign Currency Forwards

The following table summarizes our outstanding foreign currency forward contracts at December 31, 2016:

Subsidiary		Currency purchased forward		Currency sold forward	Maturity dates
	in millions				
LGE Financing	$	166.1	€	143.8	January 2017 - October 2018
LGE Financing	$	133.7	£	94.6	January 2017 - February 2019
LGE Financing	€	126.0	£	99.0	January 2017 - December 2018
LGE Financing	£	2.7	€	3.2	April 2017 - December 2017
UPC Broadband Holding	$	2.6	CZK	60.0	January 2017 - December 2017
UPC Broadband Holding	€	368.1	CHF	398.6	January 2017 - June 2017
UPC Broadband Holding	€	20.1	CZK	540.0	January 2017 - December 2017
UPC Broadband Holding	€	19.0	HUF	6,000.0	January 2017 - December 2017
UPC Broadband Holding	€	36.0	PLN	160.9	January 2017 - December 2017
UPC Broadband Holding	£	0.9	€	1.2	January 2017 - March 2017
Telenet N.V.	$	47.1	€	41.5	January 2017 - November 2017
VTR	$	149.7	CLP	104,207.4	January 2017 - December 2017

Foreign Currency Forward Options

The following tables sets forth the outstanding foreign currency forward option contracts at December 31, 2016:

Subsidiary		Notional	Exchange Currency		Weighted Average Strike Price	Maturity dates
		in millions				
VMIH (a)	£	7.0	Indian rupee	INR	95.28	January 2017 - March 2018
VMIH (a)	£	16.9	Philippine peso	PHP	66.35	January 2017 - September 2017
UPC Broadband Holding	€	286.6	Polish zloty	PLN	4.07	April 2018

____

(a) Represents the aggregate notional amount and the weighted average strike price for multiple contracts that expire at various dates within the disclosed range of maturity dates. We account for these contracts using hedge accounting.

(8) Fair Value Measurements

We use the fair value method to account for (i) certain of our investments, (ii) our derivative instruments, (iii) certain instruments that we classify as debt and (iv) the Sumitomo Share Loan. The reported fair values of these investments and instruments as of December 31, 2016 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 and certain debt 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.

U.S. 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 2016, 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 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.

During the second quarter of 2016, we entered into the Sumitomo Share Loan. As the primary input for this recurring fair value measurement is the quoted market price of the borrowed shares of Sumitomo, we believe this valuation falls under Level 1 of the fair value hierarchy.

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 over the terms of the derivative instruments, we have determined that these valuations fall under Level 3 of the fair value hierarchy. At December 31, 2016, the valuations of the ITV Collar, the Sumitomo Collar and the Lionsgate Forward were not significantly impacted by forecasted volatilities.

In order to manage our interest rate and foreign currency exchange risk, we have entered into (i) various derivative instruments and (ii) certain instruments that we classify as debt, as further described in notes 7 and 10, respectively. The recurring fair value measurements of these instruments are determined using discounted cash flow models. With the exception of the inputs for the U.S. dollar to Jamaican dollar cross-currency swaps (the **Sable Currency Swap**) held by Sable, 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 instruments. This observable data mostly includes 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 these instruments. As we would not expect changes in our or our counterparties' credit spreads to have a significant impact on the valuations of these instruments, we have determined that these valuations (other than the Sable Currency Swap valuation) fall under Level 2 of the fair value hierarchy. Due to the lack of Level 2 inputs for the Sable Currency Swap valuation, we believe this valuation falls under Level 3 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, acquisition accounting and the accounting for our initial investment in the Dutch JV. These nonrecurring valuations include the valuation of reporting units, customer relationship and other intangible assets, property and equipment, the implied value of goodwill and the valuation of our initial investment in the Dutch JV. The valuation of private reporting units and our initial investment in the Dutch JV 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 relationship, 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 2016, 2015 and 2014, we performed nonrecurring valuations for the purpose of determining (i) the acquisition accounting for the CWC Acquisition, the BASE Acquisition, the Choice Acquisition and the Ziggo Acquisition and (ii) the valuation of our initial investment in the Dutch JV. The weighted average discount rates used in the preliminary valuation of the customer relationships acquired as a result of the CWC Acquisition ranged from 8.8% to 12.8%. None of the valuations for the BASE Acquisition had a significant impact on our consolidated balance sheet. We used discount rates of (a) 11.75% and 12.25% for our respective valuations of the customer relationships and cable television franchise rights acquired as a result of the Choice Acquisition and (b) 8.50% for our valuation of the customer relationships acquired as a result of the the Ziggo Acquisition. The weighted average cost of capital used to value our initial investment in the Dutch JV was 7.0%. For information regarding our acquisitions, see note 4. For information regarding our investment in the Dutch JV, see note 6.

A summary of our assets and liabilities that are measured at fair value on a recurring basis is as follows:

		Fair value measurements at December 31, 2016 using:		
Description	**December 31, 2016**	**Quoted prices in active markets for identical assets (Level 1)**	**Significant other observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**
		in millions		
Assets:				
Derivative instruments:				
Cross-currency and interest rate derivative contracts	$ 2,606.5	$ —	$ 2,606.5	$ —
Equity-related derivative instruments	524.0	—	—	524.0
Foreign currency forward and option contracts	45.1	—	45.1	—
Other	0.5	—	0.5	—
Total derivative instruments	3,176.1	—	2,652.1	524.0
Investments	2,057.2	1,682.4	—	374.8
Total assets	$ 5,233.3	$ 1,682.4	$ 2,652.1	$ 898.8
Liabilities:				
Derivative instruments:				
Cross-currency and interest rate derivative contracts	$ 1,292.2	$ —	$ 1,281.5	$ 10.7
Equity-related derivative instruments	8.6	—	—	8.6
Foreign currency forward and option contracts	9.0	—	9.0	—
Other	0.1	—	0.1	—
Total derivative liabilities	1,309.9	—	1,290.6	19.3
Debt	344.4	215.5	128.9	—
Total liabilities	$ 1,654.3	$ 215.5	$ 1,419.5	$ 19.3

Description	December 31, 2015	Fair value measurements at December 31, 2015 using: Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
		in millions		
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

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:

	Investments	Cross-currency and interest rate derivative contracts	Equity-related derivative instruments	Total
		in millions		
Balance of net assets at January 1, 2016	$ 334.6	$ —	$ 334.1	$ 668.7
Gains included in net earnings (a):				
Gains (losses) on derivative instruments, net	—	(10.7)	337.6	326.9
Gains due to changes in fair values of certain investments, net	135.9	—	—	135.9
Settlements (b)	—	—	(184.9)	(184.9)
Dispositions	(125.4)	—	19.2	(106.2)
Additions	51.1	—	—	51.1
Foreign currency translation adjustments and other, net	(21.4)	—	9.4	(12.0)
Balance of net assets at December 31, 2016	$ 374.8	$ (10.7)	$ 515.4	$ 879.5

(a) Includes an aggregate net gain of $101.4 million related to net assets that were sold or settled during 2016.

(b) Includes the partial settlement of the Sumitomo Collar and the settlement of the Virgin Media Capped Calls. For additional information, see note 7.

(9) Long-lived Assets

Property and Equipment, Net

The details of our property and equipment and the related accumulated depreciation are set forth below:

	Estimated useful life at December 31, 2016	December 31, 2016	December 31, 2015
		in millions	
Distribution systems:	3 to 30 years		
Liberty Global Group		$ 21,249.9	$ 24,447.2
LiLAC Group		3,522.0	1,037.8
Total		24,771.9	25,485.0
Customer premises equipment:	3 to 5 years		
Liberty Global Group		4,829.9	5,651.1
LiLAC Group		1,205.4	801.4
Total		6,035.3	6,452.5
Support equipment, buildings and land:	3 to 50 years		
Liberty Global Group		4,385.5	4,461.4
LiLAC Group		954.8	341.0
Total		5,340.3	4,802.4
Total property and equipment, gross:			
Liberty Global Group		30,465.3	34,559.7
LiLAC Group		5,682.2	2,180.2
Total		36,147.5	36,739.9
Accumulated depreciation:			
Liberty Global Group		(13,216.0)	(13,719.2)
LiLAC Group		(1,821.3)	(1,336.7)
Total		(15,037.3)	(15,055.9)
Total property and equipment, net:			
Liberty Global Group		17,249.3	20,840.5
LiLAC Group		3,860.9	843.5
Total		$ 21,110.2	$ 21,684.0

Depreciation expense related to our property and equipment was $4,551.9 million, $4,501.4 million and $4,401.6 million during 2016, 2015 and 2014, respectively.

At December 31, 2016 and 2015, the amount of property and equipment, net, recorded under capital leases was $1,061.5 million and $1,281.7 million, respectively. Most of these amounts relate to assets included in our distribution systems category. Depreciation of assets under capital leases is included in depreciation and amortization in our consolidated statements of operations.

During 2016, 2015 and 2014, we recorded non-cash increases to our property and equipment related to vendor financing arrangements of $2,064.2 million, $1,481.5 million and $975.3 million, respectively, which exclude related VAT of $277.9 million, $189.3 million and $114.9 million, respectively, that was also financed by our vendors under these arrangements. In addition, during 2016, 2015 and 2014, we recorded non-cash increases to our property and equipment related to assets acquired under capital leases of $111.6 million, $106.1 million and $127.2 million, respectively.

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.

Goodwill

Changes in the carrying amount of our goodwill during 2016 are set forth below:

	January 1, 2016	Acquisitions and related adjustments	Disposition (a)	Foreign currency translation adjustments and other	December 31, 2016
			in millions		
Liberty Global Group:					
European Division:					
U.K./Ireland	$ 8,790.7	$ 12.9	$ —	$ (1,391.3)	$ 7,412.3
Belgium	1,777.1	330.7	—	(75.1)	2,032.7
The Netherlands	7,851.3	—	(7,621.2)	(230.1)	—
Germany	3,104.4	—	—	(91.2)	3,013.2
Switzerland/Austria	3,500.4	11.8	—	(68.8)	3,443.4
Total Western Europe	25,023.9	355.4	(7,621.2)	(1,856.5)	15,901.6
Central and Eastern Europe	1,186.9	1.9	—	(44.4)	1,144.4
Total European Division	26,210.8	357.3	(7,621.2)	(1,900.9)	17,046.0
Corporate and other	34.0	—	(16.0)	(0.3)	17.7
Total Liberty Global Group	26,244.8	357.3	(7,637.2)	(1,901.2)	17,063.7
LiLAC Group:					
LiLAC Division:					
CWC	—	5,544.3	—	(38.2)	5,506.1
Chile	377.0	—	—	20.9	397.9
Puerto Rico	277.7	—	—	—	277.7
Total LiLAC Division	654.7	5,544.3	—	(17.3)	6,181.7
Corporate and other (b)	120.9	—	—	—	120.9
Total LiLAC Group	775.6	5,544.3	—	(17.3)	6,302.6
Total	$ 27,020.4	$ 5,901.6	$ (7,637.2)	$ (1,918.5)	$ 23,366.3

(a) Represents goodwill associated with Ziggo Group Holding, which was contributed to the Dutch JV on December 31, 2016. For additional information, see note 5.

(b) Represents enterprise-level goodwill that is allocated to our Puerto Rico segment for purposes of our impairment tests.

Based on the results of our October 1, 2016 goodwill impairment test, a hypothetical decline of 20% or more in the fair value of any of CWC's reporting units could result in the need to record a goodwill impairment charge. At December 31, 2016, the aggregate goodwill associated with the CWC reporting units was $5.5 billion. If, among other factors, (i) the equity values of the LiLAC Group were to remain depressed or decline further 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, 2016 and 2015 and based on exchange rates as of those dates, our accumulated goodwill impairments were $180.4 million and $186.8 million, respectively. These amounts represent accumulated impairments related to our broadband communications operations in Romania, which operations are included within the European Division's Central and Eastern Europe segment.

Changes in the carrying amount of our goodwill during 2015 are set forth below:

	January 1, 2015	Acquisitions and related adjustments	Foreign currency translation adjustments and other	December 31, 2015
	in millions			
Liberty Global Group:				
European Division:				
U.K./Ireland	$ 9,245.1	$ 58.7	$ (513.1)	$ 8,790.7
Belgium	1,978.9	—	(201.8)	1,777.1
The Netherlands	8,605.0	142.2	(895.9)	7,851.3
Germany	3,456.9	—	(352.5)	3,104.4
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 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

(a) Represents enterprise-level goodwill that is allocated to our Puerto Rico segment for purposes of our impairment tests.

Intangible Assets Subject to Amortization, Net

The details of our intangible assets subject to amortization are set forth below:

	Estimated useful life at December 31, 2016	December 31, 2016 Gross carrying amount	December 31, 2016 Accumulated amortization	December 31, 2016 Net carrying amount	December 31, 2015 Gross carrying amount	December 31, 2015 Accumulated amortization	December 31, 2015 Net carrying amount
		in millions					
Customer relationships:	4 to 15 years						
Liberty Global Group		$ 5,499.4	$ (3,404.5)	$ 2,094.9	$ 10,285.3	$ (3,410.7)	$ 6,874.6
LiLAC Group		1,303.3	(160.1)	1,143.2	149.0	(31.7)	117.3
Total		6,802.7	(3,564.6)	3,238.1	10,434.3	(3,442.4)	6,991.9
Other:	2 to 20 years						
Liberty Global Group		478.3	(150.0)	328.3	205.3	(104.8)	100.5
LiLAC Group		99.0	(7.7)	91.3	0.2	(0.1)	0.1
Total		577.3	(157.7)	419.6	205.5	(104.9)	100.6
Total intangible assets subject to amortization, net:							
Liberty Global Group		5,977.7	(3,554.5)	2,423.2	10,490.6	(3,515.5)	6,975.1
LiLAC Group		1,402.3	(167.8)	1,234.5	149.2	(31.8)	117.4
Total		$ 7,380.0	$ (3,722.3)	$ 3,657.7	$ 10,639.8	$ (3,547.3)	$ 7,092.5

Amortization expense related to intangible assets with finite useful lives was $1,249.2 million, $1,324.4 million and $1,098.5 million during 2016, 2015 and 2014, respectively. Based on our amortizable intangible asset balances at December 31, 2016, 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, 2016 are presented below (in millions):

2017	$ 919.4
2018	857.5
2019	785.5
2020	405.9
2021	244.2
Thereafter	445.2
Total	$ 3,657.7

Other Indefinite-lived Intangible Assets

At December 31, 2016 and 2015, our other indefinite-lived intangible assets aggregated $610.3 million and $690.5 million, respectively, including $432.8 million at each of December 31, 2016 and 2015 related to the cable television franchise rights of Liberty Puerto Rico. Our other indefinite-lived intangible assets are included in intangible assets not subject to amortization, in our consolidated balance sheets.

(10) Debt and Capital Lease Obligations

Debt

The U.S. dollar equivalents of the components of our debt are as follows:

	December 31, 2016			Estimated fair value (c)		Principal amount	
	Weighted average interest rate (a)	Unused borrowing capacity (b)		December 31,		December 31,	
		Borrowing currency	U.S. $ equivalent	2016	2015	2016	2015
				in millions			
Liberty Global Group:							
VM Notes	5.60%	—	$ —	$ 9,311.0	$ 10,594.1	$ 9,041.0	$ 10,551.5
VM Credit Facilities	3.69%	(d)	833.3	4,531.5	3,413.7	4,505.5	3,471.1
Unitymedia Notes	5.01%	—	—	7,679.7	7,631.6	7,419.3	7,682.0
Unitymedia Revolving Credit Facilities	—	€ 500.0	527.4	—	—	—	—
UPCB SPE Notes	4.88%	—	—	1,783.7	3,131.7	1,772.8	3,142.0
UPC Holding Senior Notes	6.59%	—	—	1,569.8	1,601.4	1,451.5	1,491.1
UPC Broadband Holding Bank Facility	3.83%	€ 990.1	1,044.3	2,811.9	1,284.3	2,782.8	1,305.0
Telenet Credit Facility	3.46%	€ 545.0	574.9	3,210.0	1,443.0	3,187.5	1,474.5
Telenet SPE Notes	5.76%	—	—	1,383.9	2,155.8	1,297.3	2,097.2
Vendor financing (e) (f)	3.78%	—	—	2,284.5	1,688.9	2,284.5	1,688.9
ITV Collar Loan	1.35%	—	—	1,323.7	1,547.9	1,336.2	1,594.7
Sumitomo Collar Loan (g)	1.88%	—	—	499.7	805.6	488.2	787.6
Derivative-related debt instruments (h)	3.43%	—	—	450.7	—	426.3	—
Ziggo Group Holding debt	—	(f)	(f)	(f)	7,698.8	(f)	7,861.3
Other (i)	3.85%	—	—	558.7	395.0	564.5	291.8
Total Liberty Global Group	4.56%		2,979.9	37,398.8	43,391.8	36,557.4	43,438.7
LiLAC Group:							
CWC Notes	7.31%	—	—	2,319.6	—	2,181.1	—
CWC Credit Facilities	5.11%	$ 756.5	756.5	1,427.9	—	1,411.9	—
VTR Finance Senior Secured Notes	6.88%	—	—	1,463.9	1,301.1	1,400.0	1,400.0
VTR Credit Facility	—	(j)	192.8	—	—	—	—
Liberty Puerto Rico Bank Facility	5.11%	$ 40.0	40.0	935.2	913.0	942.5	942.5
Vendor Financing	5.50%	—	—	48.9	—	48.9	—
Total LiLAC Group	6.33%		989.3	6,195.5	2,214.1	5,984.4	2,342.5
Total debt before unamortized premiums, discounts and deferred financing costs	4.81%		$ 3,969.2	$ 43,594.3	$ 45,605.9	$ 42,541.8	$ 45,781.2

The following table provides a reconciliation of total debt before unamortized premiums, discounts and deferred financing costs to total debt and capital lease obligations:

	December 31,	
	2016	2015
	in millions	
Total debt before unamortized premiums, discounts and deferred financing costs	$ 42,541.8	$ 45,781.2
Unamortized premiums (discounts), net	44.5	(46.7)
Unamortized deferred financing costs	(270.4)	(308.2)
Total carrying amount of debt	42,315.9	45,426.3
Capital lease obligations (h) (k)	1,242.8	1,322.8
Total debt and capital lease obligations	43,558.7	46,749.1
Current maturities of debt and capital lease obligations	(2,775.1)	(2,537.9)
Long-term debt and capital lease obligations	$ 40,783.6	$ 44,211.2

____

(a) Represents the weighted average interest rate in effect at December 31, 2016 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 5.0% (including 4.7% for the Liberty Global Group and 6.8% for the LiLAC Group) at December 31, 2016. For information regarding our derivative instruments, see note 7.

(b) Unused borrowing capacity represents the maximum availability under the applicable facility at December 31, 2016 without regard to covenant compliance calculations or other conditions precedent to borrowing. At December 31, 2016, 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 from this availability to Liberty Global or its subsidiaries or other equity holders, except as shown in the table below. In the following table, for each facility that is subject to limitations on borrowing availability, we present (i) the actual borrowing availability under the respective facility and (ii) for each subsidiary where the ability to make loans or distributions from this availability is limited, the amount that can be loaned or distributed to Liberty Global or its subsidiaries or other equity holders. The amounts presented below assume no changes from December 31, 2016 borrowing levels and are based on the applicable covenant and other limitations in effect within each borrowing group at December 31, 2016, both before and after considering the impact of the completion of the December 31, 2016 compliance requirements. For information concerning certain refinancing transactions completed subsequent to December 31, 2016 that could have an impact on unused borrowing capacity and/or the availability to be borrowed, loaned or distributed, see note 20.

	December 31, 2016		Upon completion of relevant December 31, 2016 compliance reporting requirements	
	Borrowing currency	U.S. $ equivalent	Borrowing currency	U.S. $ equivalent
	in millions			
Limitation on availability to be borrowed under:				
Unitymedia Revolving Credit Facilities	€ 434.5	$ 458.3	€ 500.0	$ 527.4
UPC Broadband Holding Bank Facility	€ 676.0	$ 713.0	€ 990.1	$ 1,044.3
CWC Credit Facilities	$ 612.5	$ 612.5	$ 612.5	$ 612.5
Limitation on availability to be loaned or distributed by:				
Virgin Media	£ 539.3	$ 665.8	£ 675.0	$ 833.3
Unitymedia	€ 17.0	$ 17.9	€ 211.5	$ 223.1

(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 regarding fair value hierarchies, see note 8.

(d) The VM Revolving Facility (as defined and described under *VM Credit Facilities* below) is a multi-currency revolving facility with maximum borrowing capacity equivalent to £675.0 million ($833.3 million).

(e) 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, including amounts associated with Ziggo Group Holding at December 31, 2015. These obligations are generally due within one year and include 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.

(f) On December 31, 2016, we completed the Dutch JV Transaction. For additional information, see note 5.

(g) During 2016, the first two tranches of the Sumitomo Collar Loan were settled, resulting in a loss on debt modification and extinguishment, net, of $9.6 million. For information regarding the Sumitomo Collar Loan, see note 7.

(h) Represents amounts associated with certain derivative-related borrowing instruments, including $128.9 million carried at fair value. For information regarding fair value hierarchies, see note 8.

(i) The December 31, 2016 balance includes (i) $215.5 million associated with the Sumitomo Share Loan, which is carried at fair value, and (ii) $116.0 million of debt collateralized by certain trade receivables of Virgin Media. For information regarding fair value hierarchies, see note 8.

(j) The VTR Credit Facility is the senior secured credit facility of VTR and certain of its subsidiaries and comprises a $160.0 million facility (the **VTR Dollar Credit Facility**) and a CLP 22.0 billion ($32.8 million) facility (the **VTR Peso Credit Facility**), each of which were undrawn at December 31, 2016. 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.

(k) The U.S. dollar equivalents of our consolidated capital lease obligations are as follows:

	December 31,	
	2016	**2015**
	in millions	
Liberty Global Group:		
Unitymedia (1)	$ 657.0	$ 703.1
Telenet (2)	374.0	371.1
Virgin Media	91.2	159.5
Other subsidiaries	98.9	88.2
Total — Liberty Global Group	1,221.1	1,321.9
LiLAC Group:		
CWC	20.8	—
VTR	0.7	0.3
Liberty Puerto Rico	0.2	0.6
Total — LiLAC Group	21.7	0.9
Total	$ 1,242.8	$ 1,322.8

(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, 2016 and 2015, Telenet's capital lease obligations included €341.2 million ($359.9 million) and €329.3 million ($347.3 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.

General Information

At December 31, 2016, most of our outstanding debt had been incurred by one of our seven primary "borrowing groups." These borrowing groups include the respective restricted parent and subsidiary entities within Virgin Media, Unitymedia, UPC Holding, Telenet, CWC, 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 that, 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 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) sell 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, 2016, by UPCB Finance IV Limited (**UPCB Finance IV**, the **UPCB SPE**), and Telenet Finance V 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.

VM Notes

The details of the outstanding notes of Virgin Media as of December 31, 2016 are summarized in the following table:

VM Notes	Maturity	Interest rate	Original issue amount	Outstanding principal amount: Borrowing currency	Outstanding principal amount: U.S. $ equivalent	Estimated fair value	Carrying value (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	$ 105.8	$ 119.3
2022 VM 5.25% Dollar Senior Notes	February 15, 2022	5.250%	$ 95.0	$ 95.0	95.0	85.0	95.5
2022 VM Sterling Senior Notes	February 15, 2022	5.125%	£ 44.1	£ 44.1	54.4	55.3	54.8
2023 VM Senior Notes:							
2023 VM Dollar Senior Notes	April 15, 2023	6.375%	$ 530.0	$ 530.0	530.0	551.9	523.1
2023 VM Sterling Senior Notes	April 15, 2023	7.000%	£ 250.0	£ 250.0	308.6	334.9	304.6
2024 VM Senior Notes:							
2024 VM Dollar Senior Notes	October 15, 2024	6.000%	$ 500.0	$ 500.0	500.0	513.1	495.5
2024 VM Sterling Senior Notes	October 15, 2024	6.375%	£ 300.0	£ 300.0	370.3	393.0	367.7
2025 VM Senior Notes:							
2025 VM Euro Senior Notes	January 15, 2025	4.500%	€ 460.0	€ 460.0	485.2	502.7	479.8
2025 VM Dollar Senior Notes	January 15, 2025	5.750%	$ 400.0	$ 400.0	400.0	399.3	396.4
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	775.8	860.6	782.7
January 2021 VM Dollar Senior Secured Notes	January 15, 2021	5.250%	$ 447.9	$ 447.9	447.9	475.3	456.0
April 2021 VM Sterling Senior Secured Notes	April 15, 2021	6.000%	£ 1,100.0	£ 640.0	790.1	824.6	782.7
2025 VM Senior Secured Notes:							
2025 VM 5.5% Sterling Senior Secured Notes	January 15, 2025	5.500%	£ 430.0	£ 387.0	477.8	495.7	475.8
2025 VM 5.125% Sterling Senior Secured Notes	January 15, 2025	5.125%	£ 300.0	£ 300.0	370.3	380.8	367.0
2025 VM Dollar Senior Secured Notes	January 15, 2025	5.500%	$ 425.0	$ 425.0	425.0	432.4	423.3
2026 VM Senior Secured Notes:							
2026 VM 5.25% Dollar Senior Secured Notes	January 15, 2026	5.250%	$ 1,000.0	$ 1,000.0	1,000.0	991.3	1,002.0
2026 VM 5.5% Dollar Senior Secured Notes	August 15, 2026	5.500%	$ 750.0	$ 750.0	750.0	751.4	742.8
2027 VM Senior Secured Notes	January 15, 2027	4.875%	£ 525.0	£ 525.0	648.1	637.6	645.6
2029 VM Senior Secured Notes	March 28, 2029	6.250%	£ 400.0	£ 400.0	493.8	520.3	494.8
Total					$ 9,041.0	$ 9,311.0	$ 9,009.4

____

(a) Amounts include the impact of premiums, including amounts recorded in connection with the acquisition accounting for Virgin Media, and deferred financing costs, where applicable.

(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 Sterling 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 5.25% Dollar Senior Secured Notes	January 15, 2020
2026 VM 5.5% Dollar Senior Secured Notes	August 15, 2021
2027 VM Senior Secured Notes	January 15, 2021
2029 VM Senior Secured Notes	January 15, 2021

____

(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.

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:

	Redemption price						
	2023 VM Dollar Senior Notes	**2023 VM Sterling Senior Notes**	**2024 VM Dollar Senior Notes**	**2024 VM Sterling Senior Notes**	**2025 VM Dollar Senior Notes**	**2025 VM Euro Senior Notes**	**April 2021 VM Dollar Senior Secured Notes**
12-month period commencing	April 15	April 15	October 15	October 15	January 15	January 15	April 15
2017	N.A.	N.A.	N.A.	N.A.	N.A	N.A	102.688%
2018	103.188%	103.500%	N.A.	N.A.	N.A	N.A	101.344%
2019	102.125%	102.333%	103.000%	103.188%	N.A	N.A	100.000%
2020	101.063%	101.667%	102.000%	102.125%	102.875%	102.250%	100.000%
2021	100.000%	100.000%	101.000%	101.063%	101.917%	101.500%	N.A.
2022	100.000%	100.000%	100.000%	100.000%	100.958%	100.750%	N.A.
2023	N.A.	N.A.	100.000%	100.000%	100.000%	100.000%	N.A.
2024 and thereafter	N.A.	N.A.	N.A.	N.A.	100.000%	100.000%	N.A.

	Redemption Price							
	April 2021 VM Sterling Senior Secured Notes	**2025 VM 5.5% Sterling Senior Secured Notes**	**2025 VM Dollar Senior Secured Notes**	**2025 VM 5.125% Sterling Senior Secured Notes**	**2026 VM 5.25% Dollar Senior Secured Notes**	**2026 VM 5.5% Dollar Senior Secured Notes**	**2027 VM Senior Secured Notes**	**2029 VM Senior Secured Notes**
12-month period commencing	April 15	January 15	January 15	January 15	January 15	August 15	January 15	January 15
2017	103.000%	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2018	101.500%	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2019	100.000%	102.750%	102.750%	N.A.	N.A.	N.A.	N.A.	N.A.
2020	100.000%	101.833%	101.833%	102.563%	102.625%	N.A.	N.A.	N.A.
2021	N.A.	100.000%	100.000%	101.708%	101.313%	102.750%	102.438%	103.125%
2022	N.A.	100.000%	100.000%	100.854%	100.656%	101.375%	101.219%	102.083%
2023	N.A.	100.000%	100.000%	100.000%	100.000%	100.688%	100.609%	101.042%
2024 and thereafter	N.A.	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%

2016 Refinancing Transactions. In April 2016, Virgin Media Secured Finance issued the 2026 VM 5.5% Dollar Senior Secured Notes. The net proceeds from the 2026 VM 5.5% Dollar Senior Secured Notes were used to repay in full the then outstanding amount under the VM Revolving Facility and for general corporate purposes.

For information regarding a refinancing transaction completed subsequent to December 31, 2016 that impacts the VM Notes, see note 20.

2015 and 2014 Refinancing Transactions. During 2015 and 2014, Virgin Media completed a number of refinancing transactions that generally resulted in lower interest rates and extended maturities. In connection with these transactions, Virgin Media recognized gains (losses) on debt modification and extinguishment, net, of ($44.3 million) and $32.3 million during 2015 and 2014, respectively, which includes (i) the write-off of deferred financing costs of $28.6 million and $15.6 million, respectively, (ii) the payment of redemption premiums of $10.7 million and $123.0 million, respectively, (iii) the write-off of net unamortized (discounts) premiums ($4.2 million) and $170.9 million, respectively, and (iv) the payment of third-party costs of $0.8 million and nil, respectively.

VM Credit Facilities

The VM Credit Facilities are the senior and senior secured credit facilities of certain subsidiaries of Virgin Media. The details of our borrowings under the VM Credit Facilities as of December 31, 2016 are summarized in the following table:

VM Credit Facilities	Maturity	Interest rate	Facility amount (in borrowing currency)	Outstanding principal amount	Unused borrowing capacity	Carrying value (a)
				in millions		
Senior Secured Facilities:						
E	June 30, 2023	LIBOR + 3.50% (b)	£ 849.4	$ 1,048.6	$ —	$ 1,039.0
I	January 31, 2025	LIBOR + 2.75%	$ 3,400.0	3,400.0	—	3,349.7
VM Revolving Facility (c)	December 31, 2021	LIBOR + 2.75%	(d)	—	833.3	—
Total Senior Secured Facilities				4,448.6	833.3	4,388.7
Senior Facility:						
VM Financing Facility	September 15, 2024	5.26%	—	56.9	—	56.9
Total				$ 4,505.5	$ 833.3	$ 4,445.6

(a) The carrying values of VM Facilities E and I are net of discounts and deferred financing costs.

(b) VM Facility E has 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 a maximum borrowing capacity equivalent to £675.0 million ($833.3 million).

2016 Refinancing Transactions. In October 2016, Virgin Media Receivables Financing Notes I Designated Activity Company (**Virgin Media Receivables Financing Company**), a third-party special purpose financing entity that is not consolidated by Virgin Media or Liberty Global, issued £350.0 million ($432.1 million) principal amount of 5.50% receivables financing notes due September 15, 2024 (the **VM Receivables Financing Notes**). The net proceeds from the VM Receivables Financing Notes are used to purchase certain vendor financed receivables of Virgin Media and its subsidiaries from various third parties. To the extent that the proceeds from the VM Receivables Financing Notes exceed the amount of vendor financed receivables available to be purchased, the excess proceeds are used to fund an excess cash facility (the **VM Financing Facility**) under a new credit facility of VMIH. Virgin Media Receivables Financing Company can request the VM Financing Facility be repaid by VMIH as additional vendor financed receivables become available for purchase.

In December 2016, Virgin Media Bristol LLC entered into VM Facility I. VM Facility I was issued at 99.75% of par and is subject to a LIBOR floor of 0.0%. The net proceeds from VM Facility I were used to prepay (i) in full the $1,855.0 million outstanding principal amount under VM Facility F, (ii) in full the $900.0 million outstanding principal under the April 2021 VM Dollar Senior Secured Notes, (iii) £350.0 million ($432.1 million) of the £990.0 million ($1,222.2 million) outstanding principal amount under the April 2021 VM Sterling Senior Secured Notes and (iv) in full the £100.0 million ($123.5 million) outstanding principal amount under VM Facility D. In connection with these transactions, Virgin Media recognized a loss on debt modification and extinguishment, net, of $78.4 million. This loss includes (a) the payment of $52.6 million of redemption premium, (b) the write-off of $23.8 million of deferred financing costs and (c) the write-off of unamortized discount of $2.0 million.

For information regarding a refinancing transaction completed subsequent to December 31, 2016 that impacts the VM Credit Facilities, see note 20.

Unitymedia Notes

The details of the Unitymedia Notes as of December 31, 2016 are summarized in the following table:

				Outstanding principal amount			
Unitymedia Notes	**Maturity**	**Interest rate**	**Original issue amount**	**Borrowing currency**	**U.S. $ equivalent**	**Estimated fair value**	**Carrying value (a)**
					in millions		
UM Senior Notes (b):							
2025 UM Senior Notes....	January 15, 2025	6.125%	$ 900.0	$ 900.0	$ 900.0	$ 925.9	$ 895.3
2027 UM Senior Notes....	January 15, 2027	3.750%	€ 700.0	€ 700.0	738.3	702.3	732.6
UM Senior Secured Notes (c):							
2022 UM Senior Secured Notes	September 15, 2022	5.500%	€ 650.0	€ 526.5	555.3	587.9	550.0
January 2023 UM Senior Secured Notes:							
January 2023 UM Dollar Senior Secured Notes..........................	January 15, 2023	5.500%	$ 1,000.0	$ 1,000.0	1,000.0	1,037.5	992.7
January 2023 5.75% UM Euro Senior Secured Notes...........	January 15, 2023	5.750%	€ 500.0	€ 405.0	427.2	458.4	425.1
January 2023 5.125% UM Euro Senior Secured Notes...........	January 21, 2023	5.125%	€ 500.0	€ 405.0	427.2	453.6	425.6
April 2023 UM Senior Secured Notes	April 15, 2023	5.625%	€ 350.0	€ 280.0	295.3	317.5	293.5
2025 UM Senior Secured Notes:							
2025 UM Euro Senior Secured Notes...........	January 15, 2025	4.000%	€ 1,000.0	€ 1,000.0	1,054.7	1,101.5	1,049.0
2025 UM Dollar Senior Secured Notes...........	January 15, 2025	5.000%	$ 550.0	$ 550.0	550.0	550.7	547.0
2026 UM Senior Secured Notes	February 15, 2026	4.625%	€ 420.0	€ 420.0	443.0	469.5	441.2
2027 UM Senior Secured Notes	January 15, 2027	3.500%	€ 500.0	€ 500.0	527.3	519.1	522.6
2029 UM Senior Secured Notes	January 15, 2029	6.250%	€ 475.0	€ 475.0	501.0	555.8	494.3
Total					$ 7,419.3	$ 7,679.7	$7,368.9

(a) Amounts are net of deferred financing costs.

(b) The UM Senior Notes were issued by Unitymedia.

(c) 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**).

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.

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:

	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
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.

	Redemption price					
	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
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%

2016 Refinancing Transactions. In December 2015, the UM Senior Secured Notes Issuers, issued the 2026 UM Senior Secured Notes. A portion of the net proceeds from the 2026 UM Senior Secured Notes, which were held in escrow at December 31, 2015 as cash collateral, were used in January 2016 to redeem 10% of the principal amount of each of the following series of notes: (i) the €585.0 million ($617.0 million) outstanding principal amount of 2022 UM Senior Secured Notes and (ii) the €450.0 million ($474.6 million) outstanding principal amount of the January 2023 5.125% UM Euro 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. In connection with these transactions, Unitymedia recognized a loss on debt modification and extinguishment, net, of $4.3 million in 2016. This loss includes (a) the payment of $3.4 million of redemption premium and (b) the write-off of $0.9 million of deferred financing costs.

2015 and 2014 Refinancing Transactions. During 2015 and 2014, Unitymedia completed a number of refinancing transactions that generally resulted in lower interest rates and extended maturities. In connection with these transactions, Unitymedia recognized losses on debt modification and extinguishment, net, of $102.4 million and $130.8 million during 2015 and 2014, respectively. These losses include (i) the payment of redemption premiums of $98.8 million and $115.1 million, respectively, (ii) the write-off of deferred financing costs of $2.2 million and $14.0 million, respectively, (iii) the write-off of unamortized discounts of $1.4 million and $12.3 million, respectively, and (iv) the write-off of $10.6 million of unamortized premium in 2014.

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, 2016 are summarized in the following table:

Unitymedia Facility	Maturity	Interest rate	Facility amount (in borrowing currency)	Outstanding principal amount	Unused borrowing capacity (a)	Carrying value
				in millions		
UM Senior Secured Facility (b)	December 31, 2020	EURIBOR + 2.75%	€ 420.0	$ —	$ 443.0	$ —
UM Super Senior Secured Facility (c)	December 31, 2020	EURIBOR + 2.25%	€ 80.0	—	84.4	—
Total				$ —	$ 527.4	$ —

(a) At December 31, 2016, our availability under the Unitymedia Revolving Credit Facilities was limited to €434.5 million ($458.3 million). When the relevant December 31, 2016 compliance reporting requirements have been completed, and assuming no changes from December 31, 2016 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, 2016 are summarized in the following table:

UPCB SPE Notes	Maturity	Interest rate	Original issue amount	Outstanding principal amount: Borrowing currency	Outstanding principal amount: U.S. $ equivalent	Estimated fair value	Carrying value (a)
					in millions		
UPCB Finance IV Dollar Notes	January 15, 2025	5.375%	$ 1,140.0	$ 1,140.0	$ 1,140.0	$ 1,149.3	$ 1,132.1
UPCB Finance IV Euro Notes	January 15, 2027	4.000%	€ 600.0	€ 600.0	632.8	634.4	627.9
Total					$ 1,772.8	$ 1,783.7	$ 1,760.0

(a) Amounts are net of discounts and deferred financing costs, where applicable.

Subject to the circumstances described below, the UPCB Finance IV Dollar Notes are non-callable until January 15, 2020 and the UPCB Finance IV Euro Notes are non-callable until January 15, 2021 (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 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 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**
12-month period commencing	January 15	January 15
2020	102.688%	N.A.
2021	101.792%	102.000%
2022	100.896%	101.000%
2023	100.000%	100.500%
2024 and thereafter	100.000%	100.000%

2016 Refinancing Transactions. In August 2016, UPC Broadband Holding entered into UPC Facility AN (as defined and described below). A portion of the net proceeds from UPC Facility AN were ultimately used to redeem (i) in full the amount outstanding under the UPCB Finance V Notes and (ii) 10% of the original principal amount under the UPCB Finance VI Notes, as further described below under *UPC Broadband Holding Bank Facility - 2016 Refinancing Transactions*.

In November 2016, UPC Financing and UPC Broadband Holding entered into UPC Facility AO (as defined and described below). A portion of the net proceeds from UPC Facility AO were ultimately used to redeem the remaining outstanding amount under the UPCB Finance VI Notes, as further described below under *UPC Broadband Holding Bank Facility - 2016 Refinancing Transactions*.

2015 Refinancing Transactions. During 2015, UPC Holding completed a number of refinancing transactions that generally resulted in lower interest rates and extended maturities. In connection with these transactions, UPC Holding recognized losses on debt modification and extinguishment, net, of $59.6 million. These losses includes (i) the payment of $54.3 million of redemption premium and (ii) the write-off of $5.3 million of deferred financing costs.

UPC Holding Senior Notes

The details of the UPC Holding Senior Notes as of December 31, 2016 are summarized in the following table:

UPC Holding Senior Notes	Maturity	Outstanding principal amount: Borrowing currency		Outstanding principal amount: U.S. $ equivalent	Estimated fair value	Carrying value (a)
				in millions		
UPC Holding 6.375% Senior Notes	September 15, 2022	€	600.0	$ 632.8	$ 675.9	$ 625.9
UPC Holding 6.75% Senior Notes:						
UPC Holding 6.75% Euro Senior Notes	March 15, 2023	€	450.0	474.6	518.8	472.6
UPC Holding 6.75% CHF Senior Notes	March 15, 2023	CHF	350.0	344.1	375.1	342.5
Total				$ 1,451.5	$ 1,569.8	$ 1,441.0

(a) Amounts are net of discounts and deferred financings costs, where applicable.

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
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 and 2014 Financing Transactions. During 2015 and 2014, UPC Holding completed a number of financing transactions that generally resulted in lower interest rates and extended maturities. In connection with these transactions, UPC Holding recognized losses on debt modification and extinguishment, net, of $69.3 million and $41.5 million during 2015 and 2014, respectively, which includes (i) the payment of redemption premiums of $59.2 million and $19.7 million, respectively, (ii) the write-off of deferred financing costs of $10.1 million and $4.4 million, respectively and (iii) the write-off of unamortized discount of nil and $17.4 million, respectively.

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, 2016 are summarized in the following table:

UPC Broadband Holding Facility	Maturity	Interest rate	Facility amount (in borrowing currency) (a)	Outstanding principal amount	Unused borrowing capacity (b)	Carrying value (c)
				in millions		
AK (d)	January 15, 2027	4.000%	€ 600.0	$ 632.8	$ —	$ 627.9
AL (d)	January 15, 2025	5.375%	$ 1,140.0	1,140.0	—	1,132.1
AM	December 31, 2021	EURIBOR + 2.75%	€ 990.1	—	1,044.3	—
AN	August 31, 2024	LIBOR + 3.00%	$ 2,150.0	2,150.0	—	2,131.9
AO	January 15, 2026	EURIBOR + 3.00%	€ 600.0	632.8	—	627.9
Elimination of Facilities AK and AL in consolidation (d)				(1,772.8)	—	(1,760.0)
Total				$ 2,782.8	$ 1,044.3	$ 2,759.8

(a) Except as described in (d) below, amounts represent total third-party facility amounts at December 31, 2016.

(b) At December 31, 2016, our availability under the UPC Broadband Holding Bank Facility was limited to €676.0 million ($713.0 million). When the relevant December 31, 2016 compliance reporting requirements have been completed, and assuming no changes from the December 31, 2016 borrowing levels, we anticipate that the full amount of unused borrowing capacity under the UPC Broadband Holding Bank Facility will be available to be borrowed. UPC Facility AM has a fee on unused commitments of 1.1% per year.

(c) Amounts are net of discounts and deferred financing costs, where applicable.

(d) As further discussed in the above description of the UPCB SPE Notes, the amounts borrowed by UPC Financing Partnership (**UPC Financing**) outstanding under UPC Facilities AK and AL are eliminated in Liberty Global's consolidated financial statements.

2016 Refinancing Transactions. In August 2016, UPC Broadband Holding entered into UPC Facility AN. UPC Facility AN was issued at 99.5% of par and is subject to a LIBOR floor of 0.0%. The net proceeds from UPC Facility AN were used to prepay (i) in full the $1,305.0 million outstanding principal amount under UPC Facility AH, (ii) in full the $675.0 million outstanding principal amount under UPC Facility AC, together with accrued and unpaid interest and the related prepayment premium, to UPCB Finance V Limited (**UPCB Finance V**) and, in turn, UPCB Finance V used such proceeds to fully redeem the $675.0 million principal amount of its 7.250% senior secured notes and (iii) 10% of the $750.0 million original principal amount under UPC Facility AD, together with accrued and unpaid interest and the related prepayment premium, to UPCB Finance VI Limited (**UPCB Finance VI**) and, in turn, UPCB Finance VI used such proceeds to redeem 10% of its $750.0 million original principal amount of 6.875% senior secured notes due January 15, 2022 (the **UPCB Finance VI Notes**). The redemption price for the UPCB Finance VI Notes was 103% of the applicable redeemed principal amount. In connection with these transactions, UPC Holding recognized a loss on debt modification and extinguishment, net, of $48.8 million. This loss includes (a) the payment of $34.2 million of redemption premium, (b) the write-off of $11.0 million of deferred financing costs and (c) the write-off of unamortized discount of $3.6 million.

In November 2016, UPC Financing entered into UPC Facility AO. UPC Facility AO was issued at 99.75% of par and is subject to a EURIBOR floor of 0.0%. The net proceeds from UPC Facility AO, in conjunction with existing cash, were used to prepay in full the remaining $600.0 million outstanding principal amount under 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 the remaining $600.0 million outstanding principal amount of the UPCB Finance VI Notes. The redemption price for the UPCB Finance VI Notes was 103% of the applicable redeemed principal amount. In connection with these transactions, UPC Holding recognized a loss on debt modification and extinguishment, net, of $28.3 million. This loss includes (i) the payment of $23.0 million of redemption premium and (ii) the write-off of $5.3 million of deferred financing costs.

For information regarding a refinancing transaction completed subsequent to December 31, 2016 that impacts the UPC Broadband Holding Bank Facility, see note 20.

2015 and 2014 Refinancing Transactions. During 2015 and 2014, UPC Holding completed a number of refinancing transactions that generally resulted in lower interest rates or extended maturities under the the UPC Broadband Holding Bank Facility. In connection with these transactions, UPC Holding recognized losses on debt modification and extinguishment, net, of $76.9 million and $16.5 million during 2015 and 2014, respectively. These losses include (i) the payment of $53.5 million of redemption premium in 2015, (ii) the write-off of deferred financing costs of $18.7 million and $11.6 million, respectively, and (iii) the write-off of unamortized discounts of $4.7 million and $4.9 million, respectively.

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, 2016 are summarized in the following table:

Telenet Facility	Maturity	Interest rate	Facility amount (in borrowing currency) (a)		Outstanding principal amount	Unused borrowing capacity	Carrying value (b)
					in millions		
U (c)	August 15, 2022	6.250%	€	450.0	$ 474.6	$ —	$ 468.4
V (c)	August 15, 2024	6.750%	€	250.0	263.7	—	259.8
Z (d)	June 30, 2018	EURIBOR + 2.25%	€	120.0	—	126.6	—
AB (c)	July 15, 2027	4.875%	€	530.0	559.0	—	553.8
AE	January 31, 2025	EURIBOR + 3.25%	€	1,600.0	1,687.5	—	1,673.2
AF	January 31, 2025	LIBOR + 3.00%	$	1,500.0	1,500.0	—	1,491.1
AG (e)	June 30, 2023	EURIBOR + 2.75%	€	400.0	—	421.9	—
Telenet Overdraft Facility (f)	December 31, 2017	EURIBOR + 1.60%	€	25.0	—	26.4	—
Elimination of Telenet Facilities U, V and AB in consolidation (c)					(1,297.3)	—	(1,282.0)
Total					$ 3,187.5	$ 574.9	$ 3,164.3

(a) Except as described in (c) below, amounts represent total third-party facility amounts at December 31, 2016.

(b) Amounts are net of deferred financing costs.

(c) As further discussed in the above description of the Telenet SPE Notes, the amounts outstanding under Telenet Facilities U, V and AB are eliminated in Liberty Global's consolidated financial statements.

(d) Telenet Facility Z has a fee on unused commitments of 0.79% and is subject to a EURIBOR floor of 0.0%.

(e) In November 2016, Telenet International entered into Telenet Facility AG, which is subject to a EURIBOR floor of 0.0% and has a fee on unused commitments of 1.1% per year. In connection with this transaction, commitments under the then existing Telenet Facility X were cancelled.

(f) The Telenet Overdraft Facility has a fee on unused commitments of 0.55% and is subject to a EURIBOR floor of 0.0%.

2016 Refinancing Transactions. In May 2016, Telenet Financing USD LLC (**Telenet Finance**), a wholly-owned subsidiary of Telenet, entered into a new $850.0 million term loan facility (**Telenet Facility AD**). The net proceeds from Telenet Facility AD were used to repay in full (i) the €400.0 million ($421.9 million) outstanding principal amount under Telenet Facility P, together with accrued and unpaid interest and the related prepayment premium, to Telenet Finance IV Luxembourg S.C.A. (**Telenet Finance IV**) and, in turn, Telenet Finance IV used such proceeds to fully redeem the €400.0 million ($421.9 million) principal amount of its senior secured floating rate notes and (ii) the €300.0 million ($316.4 million) outstanding principal amount under Telenet Facility O, together with accrued and unpaid interest and the related prepayment premium, to Telenet Finance III Luxembourg S.C.A. (**Telenet Finance III**) and, in turn, Telenet Finance III used such proceeds to fully redeem the €300.0 million ($316.4 million) principal amount of its 6.625% senior secured notes. In connection with these transactions, Telenet recognized a loss on debt modification and extinguishment, net, of $18.9 million. This loss includes (a) the payment of $11.1 million of redemption premium and (b) the write-off of $7.8 million of deferred financing costs.

In November 2016, (i) Telenet International, a wholly-owned subsidiary of Telenet, entered into Telenet Facility AE which is subject to a EURIBOR floor of 0.0%, and (ii) Telenet Finance entered into Telenet Facility AF, which was issued at 99.5% of par and is subject to a LIBOR floor of 0.0%. The net proceeds from Telenet Facility AE and Telenet Facility AF were used to prepay in full (a) the €474.1 million ($500.1 million) outstanding principal amount under Telenet Facility W, (b) the €882.9 million ($931.2

million) outstanding principal amount under Telenet Facility Y, (c) the €800.0 million ($843.8 million) outstanding principal amount under Telenet Facility AA and (d) the $850.0 million outstanding principal amount under Telenet Facility AD. In connection with these transactions, Telenet recognized a loss on debt modification and extinguishment, net, of $33.9 million. This loss includes (a) the write-off of $26.0 million of deferred financing costs and (b) the payment of $7.9 million of redemption premium.

2014 Refinancing Transactions. During 2014, Telenet completed a number of refinancing transactions that generally resulted in lower interest rates and extended maturities. In connection with these transactions, Telenet 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.

Telenet SPE Notes

The details of the Telenet SPE Notes as of December 31, 2016 are summarized in the following table:

Telenet SPEs Notes	Maturity	Interest rate	Outstanding principal amount: Borrowing currency	Outstanding principal amount: U.S. $ equivalent	Estimated fair value	Carrying value (a)
				in millions		
6.25% Telenet Finance V Notes	August 15, 2022	6.250%	€ 450.0	$ 474.6	$ 505.2	$ 468.4
6.75% Telenet Finance V Notes	August 15, 2024	6.750%	€ 250.0	263.7	293.5	259.8
Telenet Finance VI Notes	July 15, 2027	4.875%	€ 530.0	559.0	585.2	553.8
Total				$ 1,297.3	$ 1,383.9	$ 1,282.0

(a) Amounts are net of deferred financing costs.

Subject to the circumstances described below, 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.

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		
	6.25% Telenet Finance V Notes	**6.75% Telenet Finance V Notes**	**Telenet Finance VI Notes**
12-month period commencing	August 15	August 15	July 15
2017	103.125%	N.A.	N.A.
2018	102.083%	103.375%	N.A.
2019	101.563%	102.531%	N.A.
2020	100.000%	101.688%	N.A.
2021	100.000%	100.844%	102.438%
2022	N.A.	100.000%	101.219%
2023	N.A.	100.000%	100.609%
2024 and thereafter	N.A.	N.A.	100.000%

2016 Refinancing Transactions. In May 2016, Telenet Finance entered into Telenet Facility AD (as defined and described above). A portion of the net proceeds from Telenet Facility AD were ultimately used to redeem in full the amounts outstanding under the Telenet Finance III Notes and Telenet Finance IV Notes, as further described above under *Telenet Credit Facility - 2016 Refinancing Transactions*.

2015 Refinancing Transaction. During 2015, Telenet completed a refinancing transaction that resulted in lower interest rates and extended maturities. In connection with this transaction, Telenet recognized a loss on debt modification and extinguishment, net, of $34.3 million, representing the payment of redemption premium.

Ziggo Group Holding Debt

2016 Financing Transactions. During 2016, prior to the completion of the Dutch JV Transaction, Ziggo Group Holding and certain of its subsidiaries completed the below financing transactions.

In August 2016, (i) Ziggo Secured Finance B.V. (**Ziggo Secured Finance**), a special purpose financing entity owned 100% by a third-party, entered into a €2,598.2 million ($2,740.4 million) term loan facility (**Ziggo Facility C**) and (ii) Ziggo Secured Finance Partnership, a subsidiary of Ziggo Secured Finance, entered into a $1,000.0 million term loan facility (**Ziggo Facility D**). Ziggo Facility C and Ziggo Facility D were each issued at 99.5% of par and mature on August 31, 2024. Ziggo Facility C bears interest at a rate of EURIBOR plus 3.75% and is subject to a EURIBOR floor of 0.0%. Ziggo Facility D bears interest at a rate of LIBOR plus 3.00% and is subject to a LIBOR floor of 0.0%. The net proceeds from Ziggo Facility C were used, in conjunction with existing cash, to prepay in full (a) the €664.2 million ($700.6 million) outstanding principal amount under an existing Ziggo Group Holding credit facility that was due on March 31, 2021 and (b) the €1,925.0 million ($2,030.4 million) outstanding principal amount under the Ziggo Euro Facility, and the net proceeds from Ziggo Facility D were used, in conjunction with existing cash, to prepay $1,000.0 million of the $2,350.0 million outstanding principal amount under the Ziggo Dollar Facility, which bears interest at a rate of LIBOR plus 2.75% and matures on January 15, 2022. Except as noted above, these transactions were completed as non-cash refinancings. In connection with these transactions, Ziggo Group Holding recognized losses on debt modification and extinguishment, net, of $15.9 million. These losses include (1) the the write-off of net unamortized discounts of $8.7 million and (2) the write-off of $7.2 million of deferred financing costs.

In September 2016, (i) Ziggo Secured Finance issued (a) $2,000.0 million principal amount of 5.50% senior secured notes (the **Ziggo 2027 Dollar Senior Secured Notes**) and (b) €775.0 million ($817.4 million) of 4.25% senior secured notes (together with the Ziggo 2027 Dollar Senior Secured Notes, the **Ziggo 2027 Senior Secured Notes**), each due January 15, 2027, and (ii)

Ziggo Bond Finance B.V., a special purpose finance entity owned 100% by a third party, issued $625.0 million principal amount of 6.00% senior notes due January 15, 2027 (the **Ziggo 2027 Senior Notes**). Ziggo Secured Finance used $300.0 million of the net proceeds from the Ziggo 2027 Dollar Senior Secured Notes to fund a senior secured proceeds loan (the **Ziggo Dollar Senior Secured Proceeds Loans**) under a term loan facility agreement. The Ziggo Dollar Senior Secured Proceeds Loans were used to prepay $300.0 million of the principal amount outstanding under the Ziggo Dollar Facility.

The remaining net proceeds from the Ziggo 2027 Senior Secured Notes and the Ziggo 2027 Senior Notes were placed into certain escrow accounts (the **Escrowed Proceeds**). Upon completion of the Dutch JV Transaction, on January 4, 2017, the Escrowed Proceeds were used to fund a distribution to Liberty Global and Vodafone. As a result of the Dutch JV Transaction, effective December 31, 2016, we no longer consolidate Ziggo Group Holding. For information regarding the Dutch JV Transaction and cash proceeds received on January 4, 2017, see note 5.

CWC Notes

The details of the outstanding notes of CWC as of December 31, 2016 are summarized in the following table:

			Outstanding principal amount			
CWC Notes	**Maturity**	**Interest rate**	**Borrowing currency**	**U.S. $ equivalent**	**Estimated fair value**	**Carrying value (a)**
				in millions		
Columbus Senior Notes (b)	March 30, 2021	7.375%	$ 1,250.0	$ 1,250.0	$ 1,332.8	$ 1,322.9
Sable Senior Notes (c)	August 1, 2022	6.875%	$ 750.0	750.0	783.7	770.0
CWC Senior Notes (d)	March 25, 2019	8.625%	£ 146.7	181.1	203.1	195.8
Total				$ 2,181.1	$ 2,319.6	$ 2,288.7

(a) Amounts include the impact of premiums recorded in connection with the acquisition accounting for the CWC Acquisition.

(b) The Columbus Senior Notes were issued by Columbus International Inc. (**Columbus**), a wholly-owned subsidiary of CWC.

(c) The Sable Senior Notes were issued by Sable.

(d) The CWC Senior Notes, which are non-callable, were issued by Cable & Wireless International Finance B.V., a wholly-owned subsidiary of CWC.

Subject to the circumstances described below, the Columbus Senior Notes are non-callable until March 30, 2018 and the Sable Senior Notes are non-callable until August 1, 2018. At any time prior to March 30, 2018, in the case of the Columbus Senior Notes and August 1, 2018, in the case of the Sable Senior Notes, Columbus and Sable may redeem some or all of the applicable notes by paying a "make-whole" premium, which is generally based on the present value of all scheduled interest payments until March 30, 2018 or August 1, 2018 (as applicable) using the discount rate (as specified in the applicable indenture) as of the redemption date, plus 50 basis points, and in the case of the Sable Senior Notes is subject to a minimum 1% of the principal amount outstanding at any redemption date prior to August 1, 2018.

Columbus and Sable (as applicable) may redeem some or all of the Columbus Senior Notes and Sable Senior Notes, respectively, 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	
	Columbus Senior Notes	**Sable Senior Notes**
12-month period commencing	March 30	August 1
2018	103.688%	105.156%
2019	101.844%	103.438%
2020	100.000%	101.719%
2021 and thereafter	N.A.	100.000%

CWC Credit Facilities

The CWC Credit Facilities are the senior secured credit facilities of certain subsidiaries of CWC. The details of our borrowings under the CWC Credit Facilities as of December 31, 2016 are summarized in the following table:

CWC Credit Facility	Maturity	Interest rate	Facility amount (in borrowing currency)	Outstanding principal amount	Unused borrowing capacity (a)	Carrying value (b)
				in millions		
CWC Term Loans	December 31, 2022	LIBOR + 4.75% (c)	$ 1,100.0	$ 1,100.0	$ —	$ 1,075.6
CWC Revolving Credit Facility	July 31, 2021	LIBOR + 3.50% (d)	$ 625.0	—	625.0	—
CWC Regional Facilities (e)	various dates ranging from 2017 to 2038	3.65% (f)	$ 443.4	311.9	131.5	310.5
Total				$ 1,411.9	$ 756.5	$ 1,386.1

(a) At December 31, 2016, our aggregate availability under the CWC Revolving Credit Facility was limited to $481.0 million. When the relevant December 31, 2016 compliance reporting requirements have been completed, and assuming no changes from the December 31, 2016 borrowing levels, we anticipate that our availability under the CWC Revolving Credit Facility will remain limited to $481.0 million. At December 31, 2016, the full amount of the unused borrowing capacity under the CWC Regional Facilities was available to be borrowed.

(b) Amounts are net of discounts and deferred financing costs, where applicable.

(c) The CWC Term Loans are subject to a LIBOR floor of 0.75%.

(d) The CWC Revolving Credit Facility has a fee on unused commitments of 0.5% per year.

(e) Represents certain amounts borrowed by CWC Panama, CWC BTC, CWC Jamaica and CWC Barbados.

(f) Represents a blended weighted average rate for all CWC Regional Facilities.

2016 Financing Transactions. On May 17, 2016, Sable and Coral-US Co-Borrower LLC (**Coral-US**), a wholly-owned subsidiary of CWC, acceded as borrowers and assumed obligations under the credit agreement dated May 16, 2016, pursuant to which (i) Coral-US entered into the CWC Term Loans and (ii) Sable and Coral-US entered into the CWC Revolving Credit Facility.

A portion of the proceeds from the CWC Term Loans and amounts drawn under the CWC Revolving Credit Facility were used to (i) repay amounts outstanding under the then existing revolving credit facility and (ii) redeem certain senior secured notes issued by Sable. In connection with these transactions, CWC recognized a gain on debt modification and extinguishment, net, of $1.5 million. This gain includes (a) the write-off of $19.0 million of unamortized premium and (b) the payment of $17.5 million of redemption premium.

In November 2016, Sable and Coral-US entered into a new $300.0 million term loan facility, which has the same maturity date, interest rate and LIBOR floor as the existing CWC Term Loans. The net proceeds from the new term loan were used to prepay indebtedness under the CWC Revolving Credit Facility and for general corporate purposes.

VTR Finance Senior Secured Notes

In January 2014, VTR Finance issued $1.4 billion principal amount of VTR Finance Senior Secured Notes, due January 15, 2024. 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:

	Redemption 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, 2016 are summarized in the following table:

Liberty Puerto Rico Facility	Maturity	Interest rate	Facility amount (in borrowing currency)	Outstanding principal amount	Unused borrowing capacity	Carrying value (a)
				in millions		
LPR Term Loan B	January 7, 2022	LIBOR + 3.50% (b)	$ 765.0	$ 765.0	$ —	$ 752.8
LPR Term Loan C	July 7, 2023	LIBOR + 6.75% (b)	$ 177.5	177.5	—	174.4
LPR Revolving Loan (c)	July 7, 2020	LIBOR + 3.50%	$ 40.0	—	40.0	—
Total				$ 942.5	$ 40.0	$ 927.2

(a) Amounts are net of discounts and deferred financing costs.

(b) LPR Term Loan B and LPR Term Loan C each have a LIBOR floor of 1.0%.

(c) 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, Liberty Puerto Rico 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, Liberty Puerto Rico 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, 2016 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, 2016 exchange rates:

Debt:

	Liberty Global Group						LiLAC Group				
	Virgin Media	Unitymedia	UPC Holding (a)	Telenet (b)	Other	Total Liberty Global Group	CWC	VTR	Liberty Puerto Rico	Total LiLAC Group	Total
						in millions					
Year ending December 31:											
2017	$ 1,262.3	$ 222.7	$ 776.9	$ 44.4	$ 519.0	$ 2,825.3	$ 95.2	$ 48.9	$ —	$ 144.1	$ 2,969.4
2018	0.5	7.8	—	7.8	1,098.6	1,114.7	54.8	—	—	54.8	1,169.5
2019	0.5	7.6	—	17.8	302.4	328.3	227.7	—	—	227.7	556.0
2020	116.5	7.2	—	11.8	27.6	163.1	38.3	—	—	38.3	201.4
2021	2,014.2	6.8	—	10.4	215.5	2,246.9	1,284.0	—	—	1,284.0	3,530.9
Thereafter	11,503.5	7,765.4	6,007.1	4,566.0	27.5	29,869.5	1,893.0	1,400.0	942.5	4,235.5	34,105.0
Total debt maturities	14,897.5	8,017.5	6,784.0	4,658.2	2,190.6	36,547.8	3,593.0	1,448.9	942.5	5,984.4	42,532.2
Unamortized premium (discount)	13.9	—	(14.6)	—	(38.9)	(39.6)	91.6	—	(7.5)	84.1	44.5
Unamortized deferred financing costs	(106.3)	(50.3)	(31.8)	(38.5)	(1.2)	(228.1)	(9.8)	(24.7)	(7.8)	(42.3)	(270.4)
Total debt	$ 14,805.1	$ 7,967.2	$ 6,737.6	$ 4,619.7	$ 2,150.5	$ 36,280.1	$ 3,674.8	$ 1,424.2	$ 927.2	$ 6,026.2	$ 42,306.3
Current portion	$ 1,262.3	$ 226.1	$ 776.9	$ 44.4	$ 190.4	$ 2,500.1	$ 95.2	$ 48.9	$ —	$ 144.1	$ 2,644.2
Noncurrent portion	$ 13,542.8	$ 7,741.1	$ 5,960.7	$ 4,575.3	$ 1,960.1	$ 33,780.0	$ 3,579.6	$ 1,375.3	$ 927.2	$ 5,882.1	$ 39,662.1

(a) 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.

(b) Amounts include the Telenet SPE Notes issued by the Telenet SPEs. As described above, the Telenet SPEs are consolidated by Telenet and Liberty Global.

Capital lease obligations:

	Liberty Global Group						
	Unitymedia	Telenet	Virgin Media	Other	Total Liberty Global Group	Total LiLAC Group	Total
				in millions			
Year ending December 31:							
2017	$ 77.4	$ 64.7	$ 38.2	$ 27.9	$ 208.2	$ 7.4	$ 215.6
2018	77.4	62.9	15.0	21.8	177.1	11.6	188.7
2019	77.4	53.3	7.1	15.7	153.5	2.1	155.6
2020	77.3	50.4	4.2	9.7	141.6	1.2	142.8
2021	77.3	48.7	3.6	7.2	136.8	0.1	136.9
Thereafter	687.1	215.8	168.9	38.5	1,110.3	—	1,110.3
Total principal and interest payments	1,073.9	495.8	237.0	120.8	1,927.5	22.4	1,949.9
Amounts representing interest	(416.9)	(121.8)	(145.8)	(21.9)	(706.4)	(0.7)	(707.1)
Present value of net minimum lease payments	$ 657.0	$ 374.0	$ 91.2	$ 98.9	$ 1,221.1	$ 21.7	$ 1,242.8
Current portion	$ 27.6	$ 43.1	$ 33.1	$ 20.4	$ 124.2	$ 6.7	$ 130.9
Noncurrent portion	$ 629.4	$ 330.9	$ 58.1	$ 78.5	$ 1,096.9	$ 15.0	$ 1,111.9

Non-cash Financing Transactions

During 2016, 2015 and 2014, certain of our refinancing transactions included non-cash borrowings and repayments of debt aggregating $8,939.5 million, $3,586.5 million and $5,418.8 million, respectively. In addition, we also completed certain non-cash financing transactions at Ziggo Group Holding, as discussed above.

(11) Income Taxes

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 earnings (loss) from continuing operations before income taxes are as follows:

	Year ended December 31,		
	2016	2015	2014
		in millions	
U.K.	$ 930.7	$ 778.1	$ 585.7
U.S.	(848.5)	(924.5)	(1,105.6)
Switzerland	274.6	395.3	326.1
The Netherlands	127.4	(1,353.3)	(644.5)
Germany	(49.3)	(5.1)	(294.7)
Chile	47.4	182.3	43.1
Panama	19.4	—	—
Belgium	13.7	175.4	21.5
Other	34.0	67.2	12.5
Total	$ 549.4	$ (684.6)	$ (1,055.9)

Income tax benefit (expense) consists of:

	Current	Deferred	Total
		in millions	
Year ended December 31, 2016:			
The Netherlands	$ (0.4)	$ 1,315.3	$ 1,314.9
U.S. (a)	146.9	88.3	235.2
Chile	(134.3)	(11.2)	(145.5)
Belgium	(105.0)	57.0	(48.0)
Switzerland	(48.5)	5.3	(43.2)
Germany	(77.9)	41.0	(36.9)
Panama	(18.6)	14.1	(4.5)
U.K.	(15.3)	17.0	1.7
Other	(49.0)	(6.8)	(55.8)
Total	$ (302.1)	$ 1,520.0	$ 1,217.9
Year ended December 31, 2015:			
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	$ (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)

(a) Includes federal and state income taxes. Our U.S. state income taxes were not material during any of the years presented.

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 factors:

	Year ended December 31, 2016	2015	2014
		in millions	
Computed "expected" tax benefit (expense) (a)	$ (109.9)	$ 136.9	$ 221.7
Change in valuation allowances (b):			
Benefit	1,149.1	6.8	11.9
Expense	(260.4)	(508.3)	(373.1)
Recognition of previously unrecognized tax benefits	212.5	44.4	29.5
Non-deductible or non-taxable foreign currency exchange results (b):			
Benefit	228.0	53.2	71.9
Expense	(34.3)	(5.1)	(16.3)
Tax effect of intercompany financing	173.7	154.9	166.9
Non-deductible or non-taxable interest and other expenses (b):			
Expense	(234.9)	(106.6)	(236.5)
Benefit	63.8	48.1	58.0
Enacted tax law and rate changes (c)	(162.2)	(280.5)	23.9
International rate differences (b) (d):			
Benefit	138.1	200.8	266.4
Expense	(43.0)	(52.7)	(27.6)
Basis and other differences in the treatment of items associated with investments in subsidiaries and affiliates (b):			
Benefit	173.6	3.3	32.6
Expense	(110.8)	(96.9)	(168.0)
Other, net	34.6	36.8	13.7
Total income tax benefit (expense)	$ 1,217.9	$ (364.9)	$ 75.0

____

(a) The statutory or "expected" tax rates are the U.K. rates of 20.0% for 2016 and 2015 and 21.0% for 2014.

(b) Country jurisdictions giving rise to income tax benefits are grouped together and shown separately from country jurisdictions giving rise to income tax expenses.

(c) During 2015, the U.K. enacted legislation that will change the corporate income tax rate from the current rate of 20.0% to 19.0% in April 2017 and 18.0% in April 2020. Substantially all of the impact of these rate changes on our deferred tax balances was recorded in the fourth quarter of 2015 when the change in law was enacted. During the third quarter of 2016, the U.K. enacted legislation that will further reduce the corporate income tax rate in April 2020 from 18.0% to 17.0%. Substantially all of the impact of this rate change on our deferred tax balances was recorded during the third quarter of 2016.

(d) Amounts reflect adjustments (either a benefit or expense) to the "expected" tax benefit (expense) for statutory rates in jurisdictions in which we operate outside of the U.K.

The components of our deferred tax assets are as follows:

	December 31, 2016	December 31, 2015
	in millions	
Deferred tax assets (a)	$ 3,024.7	$ 2,342.9
Deferred tax liabilities (a)	(1,307.8)	(1,785.7)
Net deferred tax asset	$ 1,716.9	$ 557.2

(a) Our deferred tax assets and liabilities are included in other assets: amounts recoverable in more than one year and other non-current 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:

	December 31, 2016	December 31, 2015
	in millions	
Deferred tax assets:		
Net operating loss and other carryforwards	$ 6,598.0	$ 5,873.2
Property and equipment, net	2,028.9	2,583.1
Debt	1,626.3	1,611.7
Intangible assets	99.5	112.4
Derivative instruments	68.3	173.1
Other future deductible amounts	399.6	272.5
Deferred tax assets	10,820.6	10,626.0
Valuation allowance	(6,015.4)	(6,395.6)
Deferred tax assets, net of valuation allowance	4,805.2	4,230.4
Deferred tax liabilities:		
Property and equipment, net	(1,076.9)	(1,053.4)
Intangible assets	(901.6)	(1,826.5)
Investments (including consolidated partnerships)	(485.9)	(374.5)
Derivative instruments	(175.5)	(280.7)
Other future taxable amounts	(448.4)	(138.1)
Deferred tax liabilities	(3,088.3)	(3,673.2)
Net deferred tax asset	$ 1,716.9	$ 557.2

Our deferred income tax valuation allowance decreased $380.2 million in 2016. This decrease reflects the net effect of (i) business acquisitions, (ii) the net tax benefit related to our continuing operations of $888.7 million, including a tax benefit of $1.1 billion recognized in the Netherlands upon the release of valuation allowances in the fourth quarter of 2016, (iii) foreign currency translation adjustments, (iv) the effect of enacted tax law and rate changes and (v) other individually insignificant items. The release of valuation allowances in the Netherlands is attributable to a significant improvement in our forecast of taxable income in the Netherlands, due to, among other factors, the impact of contributing Ziggo Group Holding to the Dutch JV on December 31, 2016, as further described in note 5.

Virgin Media had property and equipment on which future U.K. tax deductions can be claimed of $17.9 billion and $21.0 billion at December 31, 2016 and 2015, 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 2016 and 2015 deferred tax assets related to property and equipment, net, in the above table.

At December 31, 2016, our unrecognized excess tax benefits aggregated $139.0 million. These excess tax benefits, which represent tax deductions in excess of the financial reporting expense for share-based compensation, have not been recognized for financial reporting purposes as these tax benefits have not been realized as a reduction of income taxes payable. The tax effects of these unrecognized excess tax benefits are not included in the above table. For additional information regarding the adoption of ASU 2016-09, which will impact the accounting for unrecognized excess tax benefits beginning January 1, 2017, see note 2.

The significant components of our tax loss carryforwards and related tax assets at December 31, 2016 are as follows:

Country	Tax loss carryforward	Related tax asset	Expiration date
	in millions		
U.K.:			
Amount attributable to capital losses	$ 20,335.9	$ 3,457.1	Indefinite
Amount attributable to net operating losses	2,563.4	435.8	Indefinite
The Netherlands	4,108.7	1,027.2	2017-2025
Germany	1,608.1	259.5	Indefinite
U.S.	1,268.0	320.1	2019-2036
Luxembourg	1,124.1	292.4	Indefinite
Belgium	894.2	303.9	Indefinite
Barbados	817.9	52.4	2017 - 2023
Ireland	601.9	75.2	Indefinite
France	505.4	146.2	Indefinite
Jamaica	449.7	149.9	Indefinite
Hungary	166.8	15.0	2020-2025
Other	264.9	63.3	Various
Total	$ 34,709.0	$ 6,598.0	

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 have taxable outside basis differences on certain investments in non-U.S. subsidiaries. We intend to indefinitely reinvest earnings from these non-U.S. operations. At December 31, 2016, income and withholding taxes for which a net deferred tax liability might otherwise be required have not been provided on an estimated $6.9 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 these 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 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.

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 Austria (2012 through 2014), Chile (2011 through 2015), the Czech Republic (2013), Germany (2008 through 2014), the Netherlands (2015 through 2016), Panama (2013 through 2015), Poland (2010 and 2013), Trinidad and Tobago (2006 through 2009), the U.S. (2009 through 2011 and 2016) and certain other jurisdictions within the Caribbean and Latin America. 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 2010 and 2009 income tax returns, and have entered into the appeals process with respect to the 2010 and 2009 matters. In Chile, adjustments received from the tax authorities for the tax years 2011 and 2012 are in dispute. We have appealed these adjustments to the Chilean tax court. Also in Chile, we recorded an income tax receivable in connection with the expected utilization of certain net operating loss carryforwards upon the completion of a merger transaction of two indirect subsidiaries of Liberty Global. We are engaged in an ongoing examination by tax authorities in Chile in connection with this receivable and were notified during the third quarter of 2016 that approximately 48% of our claim has been agreed by the tax authorities. We intend to pursue the payment of the remaining portion of this receivable through available method. 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:

	2016	2015	2014
		in millions	
Balance at January 1	$ 609.9	$ 513.5	$ 490.9
Reductions for tax positions of prior years	(184.2)	(42.2)	(50.2)
Additions for tax positions of prior years	112.9	27.0	64.5
Lapse of statute of limitations	(84.6)	(8.3)	(1.9)
Effects of business acquisitions	38.0	—	—
Additions based on tax positions related to the current year	33.5	142.3	38.2
Foreign currency translation	(10.9)	(22.3)	(27.0)
Settlements with tax authorities	(13.5)	(0.1)	(1.0)
Balance at December 31	$ 501.1	$ 609.9	$ 513.5

No assurance can be given that any of these tax benefits will be recognized or realized.

As of December 31, 2016, our unrecognized tax benefits included $438.3 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 2017, it is reasonably possible that the resolution of ongoing examinations by tax authorities as well as expiration of statutes of limitation could result in reductions to our unrecognized tax benefits related to tax positions taken as of December 31, 2016. 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 2017. No assurance can be given as to the nature or impact of any changes in our unrecognized tax positions during 2017.

During 2016, 2015 and 2014, the income tax benefit (expense) of our continuing operations includes net income tax benefit (expense) of $15.7 million, ($10.3 million) and ($10.9 million), respectively, representing the net benefit (accrual) of interest and penalties during the period. Our provisions for liabilities include accrued interest and penalties of $50.1 million at December 31, 2016.

(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 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 (10,805,850 shares issued as of December 31, 2016), and one LiLAC Class A ordinary share is reserved for issuance for each LiLAC Class B ordinary share

(1,888,323 shares issued as of December 31, 2016). Additionally, at December 31, 2016, we have reserved Liberty Global Shares and LiLAC Shares for the issuance of outstanding share-based compensation awards, as set forth in the table below:

	Liberty Global Shares			LiLAC Shares		
	Class A	Class B	Class C	Class A	Class B	Class C
Options	707,293	—	2,754,480	82,818	—	212,602
SARs and PSARs	13,182,578	—	32,139,764	1,973,135	—	4,757,017
PSUs, PGUs, RSUs	3,649,647	333,334	6,652,584	550,359	58,256	1,000,190

Subject to any preferential rights of any outstanding class of our preference shares, the holders of Liberty Global Shares and LiLAC Shares are entitled to 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 Shares and LiLAC Shares, in equal or unequal amounts, or only in favor of the Liberty Global Shares or the LiLAC 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, if any, may be entitled, the holders of Liberty Global Shares and LiLAC Shares will be entitled to receive their proportionate interests, 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. 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 constituted 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 2016 and 2015 is set forth in the table below:

	Liberty Global Shares				LiLAC Shares				Old Liberty Global Shares			
	Class A	Class B	Class C	Total	Class A	Class B	Class C	Total	Class A	Class B	Class C	Total
	in millions											
Balance at January 1, 2015	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ 2.5	$ 0.1	$ 6.3	$ 8.9
Repurchase and cancellation of Old Liberty Global Shares	—	—	—	—	—	—	—	—	—	—	(0.1)	(0.1)
Liberty Global call option contracts	—	—	—	—	—	—	—	—	—	—	(0.1)	(0.1)
Balance at June 30, 2015	—	—	—	—	—	—	—	—	2.5	0.1	6.1	8.7
Impact of the LiLAC Transaction (note 1)	2.5	0.1	6.1	8.7	0.1	—	0.3	0.4	(2.5)	(0.1)	(6.1)	(8.7)
Repurchase and cancellation of Liberty Global Shares	—	—	(0.1)	(0.1)	—	—	—	—	—	—	—	—
Liberty Global call option contracts	—	—	(0.1)	(0.1)	—	—	—	—	—	—	—	—
Balance at December 31, 2015	$ 2.5	$ 0.1	$ 5.9	$ 8.5	$ 0.1	$ —	$ 0.3	$ 0.4	$ —	$ —	$ —	$ —
Impact of the CWC Acquisition (note 4)	0.3	—	0.8	1.1	—	—	0.1	0.1	—	—	—	—
Repurchase and cancellation of Liberty Global Shares	(0.3)	—	(0.4)	(0.7)	—	—	—	—	—	—	—	—
Impact of the LiLAC Distribution (note 4)	—	—	—	—	0.4	—	0.8	1.2	—	—	—	—
Balance at December 31, 2016	$ 2.5	$ 0.1	$ 6.3	$ 8.9	$ 0.5	$ —	$ 1.2	$ 1.7	$ —	$ —	$ —	$ —

Share Repurchase Programs

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 U.S. GAAP reported amount, may be created through the earnings of the U.K. parent company and, among other methods, through a reduction in share premium approved by the English Companies Court. Based on the amounts set forth in our 2015 U.K. Companies Act Report dated April 25, 2016, which are our most recent "Relevant Accounts" for the purposes of determining our Distributable Reserves under U.K. law, our Distributable Reserves were $27.9 billion as of December 31, 2015. This amount does not reflect earnings, share repurchases or other activity that occurred in 2016, each of which impacts the amount of our Distributable Reserves.

Our board of directors has approved share repurchase programs for our Liberty Global Shares and, effective November 2016, our LiLAC Shares. Under these plans, we receive authorization to acquire up to the specified amount (before direct acquisition costs) of Class A and Class C Liberty Global Shares or LiLAC Shares, or other authorized securities, from time to time through open market or privately negotiated transactions, which may include derivative transactions. The most recent authorizations provide for the repurchase of up to $4.0 billion and $300.0 million of Liberty Global and LiLAC Class A and/or Class C shares, respectively. 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, 2016, the remaining amount authorized for repurchases of Liberty Global Shares and LiLAC Shares was $1,943.4 million and $278.6 million, respectively. Subsequent to December 31, 2016, our board of directors increased the amount authorized under the share repurchase program for our Liberty Global Shares by $1.0 billion.

The following table provides details of our share repurchases during 2016, 2015 and 2014:

	Class A ordinary shares		Class C ordinary shares		
	Shares repurchased	Average price paid per share (a)	Shares repurchased	Average price paid per share (a)	Total cost (a)
					in millions
Liberty Global Shares / Old Liberty Global Shares repurchased during:					
2016	32,387,722	$ 32.26	31,557,089	$ 32.43	$ 2,068.0
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
LiLAC Shares repurchased during 2016	720,800	$ 20.65	313,647	$ 21.19	$ 21.5

(a) Includes direct acquisition costs and the effects of derivative instruments, where applicable.

(b) Amounts relate to 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 relate to 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 Liberty Global ordinary shares with an exercise price of zero. These contracts can result in the receipt of cash or 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.

LiLAC Distribution

For information regarding the LiLAC Distribution, see note 4.

Acquisition of Interests in VTR and VTR Wireless

On March 14, 2014, a subsidiary of VTR Finance acquired each of the 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.

Subsidiary Distributions

From time to time, Telenet, VTR, CWC 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, 2016, 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 primarily relates to the share-based incentive awards issued by Liberty Global to its employees and employees of its subsidiaries. A summary of the aggregate share-based compensation expense that is included in our other operating and SG&A expenses is set forth below:

	Year ended December 31,		
	2016	2015	2014
		in millions	
Liberty Global:			
Performance-based incentive awards (a)	$ 162.7	$ 157.1	$ 129.9
Other share-based incentive awards	114.9	149.6	99.7
Total Liberty Global (b)	277.6	306.7	229.6
Telenet share-based incentive awards (c)	12.2	9.2	14.6
Other	7.1	2.3	13.0
Total	$ 296.9	$ 318.2	$ 257.2
Included in:			
Other operating expense:			
Liberty Global Group	$ 3.3	$ 3.1	$ 4.8
LiLAC Group	1.4	0.3	2.8
Total other operating expense	4.7	3.4	7.6
SG&A expense:			
Liberty Global Group	278.2	312.7	240.8
LiLAC Group	14.0	2.1	8.8
Total SG&A expense	292.2	314.8	249.6
Total	$ 296.9	$ 318.2	$ 257.2

(a) Includes share-based compensation expense related to (i) Liberty Global PSUs, including amounts resulting from the 2016 PSUs, as described and defined below, (ii) a challenge performance award plan for certain executive officers and key employees (the **Challenge Performance Awards**) and (iii) PGUs to our Chief Executive Officer, as described below. The Challenge Performance Awards include PSARs and PSUs.

(b) In connection with the LiLAC Transaction, our compensation committee approved modifications to our outstanding share-based incentive awards (the **2015 Award Modifications**) in accordance with the underlying share-based incentive plans. The objective of our 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 our 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 share-based compensation expense should be recorded as a result of the 2015 Award Modifications, we were 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 2015 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 2015 Award Modifications had been used. Accordingly, the Black-Scholes fair values of our options, SARs and PSARs increased as a result of the 2015 Award Modifications, resulting in incremental share-based compensation of $99.3 million, including $16.1 million and $69.3 million recognized during 2016 and 2015, respectively, and $13.9 million that will be recognized in future periods through 2019 as the related awards vest.

(c) Represents the share-based compensation expense associated with Telenet's share-based incentive awards, which, at December 31, 2016, included (i) warrants and employee stock options (2,473,404 awards outstanding at a weighted average exercise price of €43.70 ($46.09)), (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 ($42.82)), (iii) performance-based share awards (173,640 awards outstanding) and (iv) performance-based specific stock option plans for employees (18,750 awards outstanding at a weighted average exercise price of €48.83 ($51.50)).

As of December 31, 2016, $450.4 million of total unrecognized compensation cost related to our Liberty Global share-based compensation awards is expected to be recognized as an expense by our company in the future over a weighted-average period of approximately 2.5 years.

The following table summarizes certain information related to the share-based incentive awards granted and exercised with respect to Liberty Global ordinary shares:

	Year ended December 31,		
	2016	2015	2014
Assumptions used to estimate fair value of options, SARs and PSARs granted:			
Risk-free interest rate	0.88 - 1.49%	0.96 - 1.89%	0.81 - 1.77%
Expected life	3.2 - 5.5 years	3.0 - 5.5 years	3.1 - 5.1 years
Expected volatility	27.4 - 42.9%	23.1 - 30.1%	25.1 - 28.7%
Expected dividend yield	none	none	none
Weighted average grant-date fair value per share of awards granted:			
Options	$ 10.40	$ 14.73	$ 11.40
SARs	$ 8.60	$ 10.76	$ 8.93
PSARs	$ —	$ —	$ 8.15
RSUs	$ 36.67	$ 51.85	$ 40.68
PSUs	$ 33.97	$ 51.57	$ 40.42
PGUs	$ —	$ —	$ 44.04
Total intrinsic value of awards exercised (in millions):			
Options	$ 16.9	$ 106.8	$ 126.6
SARs	$ 42.2	$ 51.7	$ 48.7
PSARs	$ 0.7	$ 0.2	$ 0.4
Cash received from exercise of options (in millions)	$ 17.4	$ 40.5	$ 54.8
Income tax benefit related to share-based compensation (in millions)	$ 55.2	$ 67.4	$ 54.6

Share Incentive Plans — Liberty Global Ordinary Shares

Incentive Plans

As of December 31, 2016, 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, 2016, the Liberty Global 2014 Incentive Plan and the Liberty Global 2014 Nonemployee Director Incentive Plan had 64,795,919 and 9,789,929 ordinary shares available for grant, respectively.

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.

Awards under the VM Incentive Plan issued prior to the June 7, 2013 acquisition of Virgin Media have a 10-year term and become fully exercisable within five years of continued employment. Awards (other than performance-based awards) issued under the Liberty Global 2005 Incentive Plan and issued 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. All awards issued under the Liberty Global 2005 Director Incentive Plan were fully vested as of December 31, 2016, and other than RSUs, expire 7 to 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.

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.

Liberty Global PSUs

Equity awards are granted to executive officers and key employees 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 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. Although PSUs are generally granted on an annual basis, no PSUs will be granted in 2017 to recipients of the 2016 PSUs, as defined and described below.

In March 2015, our compensation committee approved the grant of PSUs to executive officers and key employees (the **2015 PSUs**). The performance plan for the 2015 PSUs covered a two-year period ending December 31, 2016 and included a performance target based on the achievement of a specified compound annual growth rate (**CAGR**) in a consolidated Adjusted OIBDA metric (as defined in note 18). The performance target was 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 will result in award recipients earning 50% to 150% of their respective PSUs, subject to reduction or forfeiture based on individual performance. The percentage of the 2015 PSUs that has been earned by participants has not been finalized. The 2015 PSUs will vest 50% on each of April 1 and October 1 of 2017.

In February 2016, our compensation committee approved the grant of PSUs to executive officers and key employees (the **2016 PSUs**) 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. The 2016 PSUs require delivery of a compound annual growth rate of our consolidated Adjusted OIBDA CAGR of 6.0% during the three-year performance period, with over- and under-performance payout opportunities should the Adjusted OIBDA CAGR exceed or fail to meet the target, as applicable. The performance payout may be adjusted at the compensation committee's discretion for events that may affect comparability, such as changes in foreign currency exchange rates and accounting principles or policies. A performance range of 75% to 167.5% of the target Adjusted OIBDA CAGR will generally result in award recipients earning 75% to 300% of their target 2016 PSUs, subject to reduction or forfeiture based on individual performance. The earned 2016 PSUs will vest 50% on each of April 1, 2019 and October 1, 2019.

Liberty Global Performance Grant Award

Effective April 30, 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. Our Chief Executive Officer also received 41,589 PGUs with respect to each Class A and Class B LiLAC Shares as a result of the LiLAC Distribution in 2016 and 33,333 PGUs with respect to each Class A and Class B LiLAC Shares as a result of the LiLAC Transaction in 2015. Each of these additional distributions vest over the same period as the May 1, 2014 award grant described above.

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 represented the right to receive one Liberty Global or LiLAC Class A or Class C ordinary share, as applicable. The performance criteria for the Challenge Performance Awards was based on the participant's performance and achievement of individual goals in each of the years 2013, 2014 and 2015. As a result of satisfying performance conditions, 100% of the then outstanding Challenge Performance Awards vested and became fully exercisable 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.

LiLAC Distribution

In connection with the LiLAC Distribution, our compensation committee approved modifications to our outstanding share-based incentive awards (the **2016 Award Modification**) in accordance with the underlying share-based incentive plans. The objective of our compensation committee was to ensure a relatively unchanged intrinsic value of outstanding equity awards before and after the LiLAC Distribution. The mechanism to modify outstanding share-based incentive awards, as approved by our compensation committee, utilized an analysis of the prices of the respective shares before and after the share issuance. Based upon this approach, we determined the incremental value associated with the 2016 Award Modification was immaterial. As a result, we did not recognize any incremental share-based compensation expense associated with the 2016 Award Modification. The impact of the LiLAC Distribution is separately presented in the below tables.

Share-based Award Activity — Liberty Global Ordinary Shares

The following tables summarize the share-based award activity during 2016 with respect to awards issued by Liberty Global:

Liberty Global Shares

Options — Class A ordinary shares	Number of shares	Weighted average exercise price	Weighted average remaining contractual term	Aggregate intrinsic value
			in years	in millions
Outstanding at January 1, 2016	873,333	$ 22.85		
Granted	79,899	$ 36.06		
Forfeited	(9,328)	$ 34.59		
Exercised	(207,034)	$ 20.99		
Outstanding at June 30, 2016	736,870	$ 24.66		
Impact of the LiLAC Distribution	39,000	$ (3.49)		
Outstanding at July 1, 2016	775,870	$ 21.17		
Forfeited	(5,597)	$ 16.65		
Exercised	(62,980)	$ 17.55		
Outstanding at December 31, 2016	707,293	$ 21.53	4.0	$ 7.5
Exercisable at December 31, 2016	491,061	$ 17.93	3.2	$ 6.6

Liberty Global Shares — continued:

Options — Class C ordinary shares	Number of shares	Weighted average exercise price	Weighted average remaining contractual term	Aggregate intrinsic value
			in years	in millions
Outstanding at January 1, 2016	2,738,536	$ 23.98		
Granted	159,798	$ 35.15		
Forfeited	(51,787)	$ 35.07		
Exercised	(541,147)	$ 19.40		
Outstanding at June 30, 2016	2,305,400	$ 25.58		
Impact of the LiLAC Distribution	166,139	$ (3.43)		
Outstanding at July 1, 2016	2,471,539	$ 22.15		
Granted	499,552	$ 26.43		
Forfeited	(65,243)	$ 28.24		
Exercised	(151,368)	$ 16.73		
Outstanding at December 31, 2016	2,754,480	$ 23.08	3.5	$ 21.5
Exercisable at December 31, 2016	1,285,751	$ 16.50	3.1	$ 17.7

SARs — Class A 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, 2016	7,693,152	$ 34.89		
Granted	2,641,914	$ 37.73		
Forfeited	(123,302)	$ 43.48		
Exercised	(336,732)	$ 11.64		
Outstanding at June 30, 2016	9,875,032	$ 36.34		
Impact of the LiLAC Distribution	616,160	$ (4.62)		
Outstanding at July 1, 2016	10,491,192	$ 31.72		
Granted	144,740	$ 32.12		
Forfeited	(199,840)	$ 37.27		
Exercised	(131,027)	$ 19.66		
Outstanding at December 31, 2016	10,305,065	$ 31.77	4.5	$ 26.6
Exercisable at December 31, 2016	5,284,047	$ 28.26	3.3	$ 26.4

Liberty Global Shares — continued:

SARs — 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, 2016	18,685,347	$ 31.70		
Granted	5,283,828	$ 36.60		
Forfeited	(256,622)	$ 41.60		
Exercised	(995,103)	$ 11.66		
Outstanding at June 30, 2016	22,717,450	$ 33.61		
Impact of the LiLAC Distribution	1,412,585	$ (4.42)		
Outstanding at July 1, 2016	24,130,035	$ 29.19		
Granted	289,480	$ 31.22		
Forfeited	(409,379)	$ 35.63		
Exercised	(451,744)	$ 18.12		
Outstanding at December 31, 2016	23,558,392	$ 29.32	4.2	$ 79.7
Exercisable at December 31, 2016	13,327,427	$ 25.68	3.1	$ 79.0

PSARs — Class A 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, 2016	2,889,457	$ 31.93		
Forfeited	(657)	$ 31.87		
Outstanding at June 30, 2016	2,888,800	$ 31.93		
Impact of the LiLAC Distribution	16,559	$ (4.17)		
Outstanding at July 1, 2016	2,905,359	$ 27.76		
Exercised	(27,846)	$ 27.71		
Outstanding at December 31, 2016 (a)	2,877,513	$ 27.76	3.4	$ 8.2
Exercisable at December 31, 2016	2,877,513	$ 27.76	3.4	$ 8.2

Liberty Global 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, 2016	8,629,481	$ 30.52		
Forfeited	(1,961)	$ 30.46		
Outstanding at June 30, 2016	8,627,520	$ 30.52		
Impact of the LiLAC Distribution	51,613	$ (4.12)		
Outstanding at July 1, 2016	8,679,133	$ 26.40		
Exercised	(97,761)	$ 26.27		
Outstanding at December 31, 2016 (a)	8,581,372	$ 26.40	3.4	$ 28.5
Exercisable at December 31, 2016	8,581,372	$ 26.40	3.4	$ 28.5

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, 2016	564,976	$ 44.06	
Granted	268,427	$ 37.72	
Forfeited	(23,233)	$ 46.22	
Released from restrictions	(101,374)	$ 41.30	
Outstanding at June 30, 2016	708,796	$ 41.98	
Impact of the LiLAC Distribution	101,140	$ (5.73)	
Outstanding at July 1, 2016	809,936	$ 36.25	
Granted	39,198	$ 32.11	
Forfeited	(49,529)	$ 37.83	
Released from restrictions	(130,545)	$ 35.00	
Outstanding at December 31, 2016	669,060	$ 36.13	3.0

Liberty Global Shares — continued:

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, 2016	1,194,182	$ 41.64	
Granted	536,854	$ 36.59	
Forfeited	(50,385)	$ 44.29	
Released from restrictions	(236,244)	$ 38.06	
Outstanding at June 30, 2016	1,444,407	$ 40.26	
Impact of the LiLAC Distribution	215,866	$ (5.38)	
Outstanding at July 1, 2016	1,660,273	$ 34.88	
Granted	78,396	$ 31.21	
Forfeited	(102,806)	$ 36.22	
Released from restrictions	(285,730)	$ 35.01	
Outstanding at December 31, 2016	1,350,133	$ 34.54	3.0

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, 2016	1,690,200	$ 42.61	
Granted	2,075,660	$ 34.70	
Performance adjustment (b)	17,499	$ 39.33	
Forfeited	(16,719)	$ 45.12	
Released from restrictions	(696,341)	$ 39.51	
Outstanding at June 30, 2016	3,070,299	$ 37.93	
Impact of the LiLAC Distribution	97,105	$ (4.47)	
Outstanding at July 1, 2016	3,167,404	$ 33.46	
Granted	96,604	$ 32.10	
Forfeited	(28,538)	$ 34.01	
Released from restrictions	(254,883)	$ 34.78	
Outstanding at December 31, 2016	2,980,587	$ 33.30	2.2

Liberty Global Shares — continued:

PGUs — Class B ordinary shares	Number of shares	Weighted average grant-date fair value per share	Weighted average remaining contractual term
			in years
Outstanding at January 1, 2016	666,667	$ 42.43	
Released from restriction	(333,333)	$ 42.43	
Outstanding at June 30, 2016	333,334	$ 42.43	
Impact of the LiLAC Distribution	—	$ (4.71)	
Outstanding at July 1, 2016	333,334	$ 37.72	
Outstanding at December 31, 2016	333,334	$ 37.72	0.2

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, 2016	2,158,351	$ 41.30	
Granted	4,151,320	$ 33.63	
Performance adjustment (b)	35,000	$ 38.08	
Forfeited	(33,508)	$ 43.47	
Released from restrictions	(837,276)	$ 35.58	
Outstanding at June 30, 2016	5,473,887	$ 36.32	
Impact of the LiLAC Distribution	204,111	$ (4.30)	
Outstanding at July 1, 2016	5,677,998	$ 32.02	
Granted	193,208	$ 31.15	
Forfeited	(57,370)	$ 33.15	
Released from restrictions	(511,385)	$ 34.04	
Outstanding at December 31, 2016	5,302,451	$ 31.78	2.4

(a) The performance criteria was achieved during 2016 and, as a result, all then outstanding awards became fully exercisable.

(b) Represents the increase in PSUs associated with the first quarter 2016 determination that 103.6% of the PSUs that were granted in 2014 (the **2014 PSUs**) had been earned. As of December 31, 2016, all of the earned 2014 PSUs have been released from restriction.

LiLAC Shares

Options — Class A ordinary shares	Number of shares	Weighted average exercise price	Weighted average remaining contractual term	Aggregate intrinsic value
			in years	in millions
Outstanding at January 1, 2016	21,233	$ 24.29		
Granted	3,995	$ 37.16		
Forfeited	(238)	$ 43.84		
Exercised	(1,312)	$ 9.56		
Outstanding at June 30, 2016	23,678	$ 27.08		
Impact of the LiLAC Distribution	59,140	$ 1.71		
Outstanding at July 1, 2016	82,818	$ 28.79		
Outstanding at December 31, 2016	82,818	$ 28.79	3.6	$ 0.3
Exercisable at December 31, 2016	57,331	$ 23.13	2.7	$ 0.3

Options — Class C ordinary shares	Number of shares	Weighted average exercise price	Weighted average remaining contractual term	Aggregate intrinsic value
			in years	in millions
Outstanding at January 1, 2016	57,742	$ 22.42		
Granted	7,990	$ 38.67		
Forfeited	(474)	$ 43.91		
Exercised	(4,439)	$ 9.86		
Outstanding at June 30, 2016	60,819	$ 25.30		
Impact of the LiLAC Distribution	151,783	$ 1.27		
Outstanding at July 1, 2016	212,602	$ 26.57		
Outstanding at December 31, 2016	212,602	$ 26.57	3.3	$ 0.8
Exercisable at December 31, 2016	161,637	$ 21.78	2.6	$ 0.8

LiLAC Shares — continued:

SARs — Class A 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, 2016	233,192	$ 31.07		
Granted	71,990	$ 37.53		
Forfeited	(1,963)	$ 39.57		
Exercised	(6,852)	$ 7.84		
Outstanding at June 30, 2016	296,367	$ 33.12		
Impact of the LiLAC Distribution	719,933	$ 2.36		
Outstanding at July 1, 2016	1,016,300	$ 35.48		
Granted	502,892	$ 34.76		
Forfeited	(30,893)	$ 35.44		
Exercised	(1,898)	$ 12.78		
Outstanding at December 31, 2016	1,486,401	$ 35.27	5.0	$ 0.7
Exercisable at December 31, 2016	571,960	$ 31.03	3.1	$ 0.7

SARs — 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, 2016	579,273	$ 29.73		
Granted	143,980	$ 40.61		
Forfeited	(4,173)	$ 39.81		
Exercised	(19,413)	$ 8.01		
Outstanding at June 30, 2016	699,667	$ 32.51		
Impact of the LiLAC Distribution	1,709,612	$ 1.53		
Outstanding at July 1, 2016	2,409,279	$ 34.04		
Granted	1,005,784	$ 35.14		
Forfeited	(61,972)	$ 35.86		
Exercised	(49,705)	$ 13.49		
Outstanding at December 31, 2016	3,303,386	$ 34.65	4.7	$ 1.4
Exercisable at December 31, 2016	1,456,876	$ 29.94	2.9	$ 1.4

LiLAC Shares — continued:

PSARs — Class A 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, 2016	140,127	$ 30.08		
Forfeited	(33)	$ 30.02		
Outstanding at June 30, 2016	140,094	$ 30.08		
Impact of the LiLAC Distribution	346,640	$ 2.38		
Outstanding at July 1, 2016	486,734	$ 32.46		
Outstanding at December 31, 2016 (a)	486,734	$ 32.46	3.5	$ —
Exercisable at December 31, 2016	486,734	$ 32.46	3.5	$ —

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, 2016	418,492	$ 30.30		
Forfeited	(99)	$ 30.23		
Outstanding at June 30, 2016	418,393	$ 30.30		
Impact of the LiLAC Distribution	1,035,238	$ 2.01		
Outstanding at July 1, 2016	1,453,631	$ 32.31		
Outstanding at December 31, 2016 (a)	1,453,631	$ 32.31	3.5	$ —
Exercisable at December 31, 2016	1,453,631	$ 32.31	3.5	$ —

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, 2016	1,713	$ 45.12	
Granted	52,349	$ 40.79	
Released from restrictions	(301)	$ 48.09	
Outstanding at June 30, 2016	53,761	$ 40.89	
Impact of the LiLAC Distribution	3,365	$ 0.01	
Outstanding at July 1, 2016	57,126	$ 40.90	
Granted	128,550	$ 34.81	
Forfeited	(15,356)	$ 38.05	
Released from restrictions	(10,939)	$ 41.28	
Outstanding at December 31, 2016	159,381	$ 36.24	3.0

LiLAC Shares — continued:

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, 2016	3,428	$ 43.97	
Granted	128,186	$ 42.79	
Released from restrictions	(606)	$ 44.03	
Outstanding at June 30, 2016	131,008	$ 42.82	
Impact of the LiLAC Distribution	6,938	$ (0.18)	
Outstanding at July 1, 2016	137,946	$ 42.64	
Granted	257,135	$ 35.20	
Forfeited	(34,375)	$ 39.64	
Released from restrictions	(26,067)	$ 42.67	
Outstanding at December 31, 2016	334,639	$ 37.23	3.0

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, 2016	86,303	$ 42.56	
Granted	72,848	$ 35.46	
Performance adjustment (b)	870	$ 39.33	
Forfeited	(755)	$ 46.11	
Released from restrictions	(34,413)	$ 39.57	
Outstanding at June 30, 2016	124,853	$ 39.20	
Impact of the LiLAC Distribution	316,800	$ (3.51)	
Outstanding at July 1, 2016	441,653	$ 35.69	
Granted	7,108	$ 30.67	
Forfeited	(1,890)	$ 34.85	
Released from restrictions	(55,893)	$ 35.94	
Outstanding at December 31, 2016	390,978	$ 35.57	2.0

PGUs — Class B ordinary shares	Number of shares	Weighted average grant-date fair value per share	Weighted average remaining contractual term
			in years
Outstanding at January 1, 2016	33,333	$ 42.43	
Released from restriction	(16,666)	$ 42.43	
Outstanding at June 30, 2016	16,667	$ 42.43	
Impact of the LiLAC Distribution	41,589	$ (3.36)	
Outstanding at July 1, 2016	58,256	$ 39.07	
Outstanding at December 31, 2016	58,256	$ 39.07	0.2

LiLAC 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, 2016	111,215	$ 41.36	
Granted	145,696	$ 37.70	
Performance adjustment (b)	1,741	$ 38.08	
Forfeited	(1,518)	$ 44.44	
Released from restrictions	(40,692)	$ 35.69	
Outstanding at June 30, 2016	216,442	$ 39.91	
Impact of the LiLAC Distribution	563,081	$ (5.17)	
Outstanding at July 1, 2016	779,523	$ 34.74	
Granted	14,216	$ 30.82	
Forfeited	(3,782)	$ 34.53	
Released from restrictions	(124,406)	$ 34.12	
Outstanding at December 31, 2016	665,551	$ 34.77	2.3

____

(a) All outstanding awards became fully exercisable during 2016 as the performance criteria was achieved during the year.

(b) Represents the increase in PSUs associated with the first quarter 2016 determination that 103.6% of the 2014 PSUs had been earned. As of December 31, 2016, all of the earned 2014 PSUs have been released from restrictions.

(14) Restructuring Liabilities

A summary of changes in our restructuring liabilities during 2016 is set forth in the table below:

	Employee severance and termination	Office closures	Contract termination and other	Total
		in millions		
Restructuring liability as of January 1, 2016	$ 68.5	$ 7.3	$ 70.7	$ 146.5
Restructuring charges	144.4	3.4	41.3	189.1
Cash paid	(115.6)	(2.6)	(46.7)	(164.9)
CWC and BASE liabilities at acquisition date	15.3	—	2.0	17.3
Disposal (a)	(28.1)	(0.5)	—	(28.6)
Foreign currency translation adjustments and other	(6.9)	(0.3)	(8.6)	(15.8)
Restructuring liability as of December 31, 2016	$ 77.6	$ 7.3	$ 58.7	$ 143.6
Current portion	$ 73.4	$ 2.2	$ 28.0	$ 103.6
Noncurrent portion	4.2	5.1	30.7	40.0
Total	$ 77.6	$ 7.3	$ 58.7	$ 143.6

____

(a) Represents restructuring liabilities associated with Ziggo Group Holding.

Our restructuring charges during 2016 included employee severance and termination costs related to certain reorganization and integration activities of $59.3 million in Germany, $26.1 million in U.K./Ireland, $20.4 million in the European Division's central operations, $11.6 million in Chile and $10.8 million in the Netherlands. Our restructuring charges during 2016 also included contract termination and other costs related to (i) contract termination charges of $15.0 million included in the European Division's central operations, $7.7 million in the corporate and other category and $5.5 million in Chile and (ii) a charge of $11.6 million resulting from the write-off by Liberty Puerto Rico of a prepaid indefeasible right of use for telecommunications capacity due to the abandonment of this capacity in favor of capacity on CWC's network.

A summary of changes in our restructuring liabilities during 2015 is set forth in the table below:

	Employee severance and termination	Office closures	Contract termination	Total
	in millions			
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, as further described below.

A summary of changes in our restructuring liabilities during 2014 is set forth in the table below:

	Employee severance and termination	Office closures	Contract termination	Total
	in millions			
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 Division's central operations, respectively.

(15) Defined Benefit Plans

Certain of our subsidiaries 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,		
	2016	2015	2014
		in millions	
Projected benefit obligation	$ 3,200.3	$ 1,188.3	$ 1,247.6
Fair value of plan assets (a)	$ 3,108.7	$ 1,092.6	$ 1,122.7
Net liability	$ 91.6	$ 95.7	$ 124.9
Net periodic pension cost (b)	$ 10.1	$ 11.8	$ 9.6

____

(a) The fair value of plan assets at December 31, 2016 includes $1,707.4 million, $199.1 million and $1,202.2 million of assets that are valued based on Level 1, Level 2 and Level 3 inputs, respectively, 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 (including $1,018.3 million of investments valued using Level 3 inputs that are held by the CWSF, as defined and described below).

(b) The 2016 and 2015 amounts exclude aggregate curtailment gains of $1.4 million and $7.9 million, respectively, which are included in impairment, restructuring and other operating items, net, in our consolidated statements of operations.

At December 31, 2016, the Cable & Wireless Superannuation Fund (the **CWSF**), which is CWC's largest defined benefit plan, had (i) a projected benefit obligation of $1,675.7 million, (ii) fair value of plan assets of $1,666.0 million and (iii) a funded status deficit of $9.7 million. During the period from April 1, 2016 through December 31, 2016, CWC made cash contributions to the CWSF of $44.3 million (including $1.1 million of contributions made subsequent to the completion of the CWC Acquisition), which was based in part on the triennial actuarial funding valuation as of March 31, 2013. CWC's acquisition of Columbus constituted a "change of control" under the contingent funding agreement (the **Contingent Funding Agreement**) between CWC and the trustee of the CWSF and, therefore, the trustee of the CWSF has the right to drawdown on the $123.5 million letters of credit that were put in place in connection with the acquisition of Columbus pursuant to the terms of the Contingent Funding Agreement. Based on the pending outcome of the triennial actuarial valuation as of March 31, 2016, which is expected to be completed during the second quarter of 2017, CWC's contributions necessary to fund the CWSF by April 2019 are currently expected to range from nil to $28.4 million per year during 2017, 2018 and 2019. CWC is currently in negotiations with the trustee of the CWSF with respect to the future funding requirements of the CWSF and the outstanding letters of credit with a view to addressing the remaining deficit through future contributions over a period of time similar in structure to prior triennial period contribution schedules. No assurance can be given as to the outcome of such negotiations.

Based on December 31, 2016 exchange rates and information available as of that date, our subsidiaries' contributions to their respective defined benefit plans in 2017 are expected to aggregate $88.2 million, including $29.6 million attributable to the CWSF.

(16) Accumulated Other Comprehensive Earnings (Loss)

Accumulated other comprehensive earnings (loss) 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 (loss), net of taxes, are summarized as follows:

	Liberty Global shareholders				
	Foreign currency translation adjustments	Pension-related adjustments and other	Accumulated other comprehensive earnings (loss)	Non-controlling interests	Total accumulated other comprehensive earnings (loss)
			in millions		
Balance at January 1, 2014	$ 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
Other comprehensive loss	(1,251.8)	(16.5)	(1,268.3)	(3.1)	(1,271.4)
Balance at December 31, 2016	$ (272.6)	$ (99.8)	$ (372.4)	$ 17.3	$ (355.1)

The components of other comprehensive loss, 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 loss, net of amounts reclassified to our consolidated statements of operations:

	Pre-tax amount	Tax benefit	Net-of-tax amount
		in millions	
Year ended December 31, 2016:			
Foreign currency translation adjustments (a)	$ (1,248.8)	$ (2.4)	$ (1,251.2)
Pension-related adjustments and other	(20.7)	0.5	(20.2)
Other comprehensive loss	(1,269.5)	(1.9)	(1,271.4)
Other comprehensive loss attributable to noncontrolling interests (b)	3.1	—	3.1
Other comprehensive loss attributable to Liberty Global shareholders	$ (1,266.4)	$ (1.9)	$ (1,268.3)
Year ended December 31, 2015:			
Foreign currency translation adjustments (a)	$ (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 (b)	(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 (a)	$ (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 (b)	0.8	(0.3)	0.5
Other comprehensive loss attributable to Liberty Global shareholders	$ (905.5)	$ 23.3	$ (882.2)

(a) For additional information regarding reclassifications of foreign currency translation losses to earnings, see the consolidated statements of comprehensive earnings (loss) and note 5.

(b) Amounts represent the noncontrolling interest owners' share of our pension-related adjustments.

(17) Commitments and Contingencies

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 network and connectivity commitments, programming contracts, purchases of customer premises and other equipment and services, non-cancellable operating leases and other items. The following table sets forth the U.S. dollar equivalents of such commitments as of December 31, 2016:

	Payments due during:						
	2017	2018	2019	2020	2021	Thereafter	Total
				in millions			
Network and connectivity commitments	$ 738.8	$ 386.9	$ 308.9	$ 257.4	$ 240.6	$ 868.2	$ 2,800.8
Programming commitments	1,041.2	900.5	457.2	183.5	62.1	93.1	2,737.6
Purchase commitments	1,236.9	212.6	145.9	102.6	21.0	70.3	1,789.3
Operating leases	133.5	113.2	94.0	73.8	60.7	249.0	724.2
Other commitments	46.7	15.0	12.2	8.5	7.4	14.4	104.2
Total (a)	$ 3,197.1	$ 1,628.2	$ 1,018.2	$ 625.8	$ 391.8	$ 1,295.0	$ 8,156.1

(a) The commitments included in this table do not reflect any liabilities that are included in our December 31, 2016 consolidated balance sheet. Such commitments are all undertaken by our subsidiaries.

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 and (iii) service commitments associated with our network extension projects, primarily in the U.K. 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.

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 programming and copyright costs aggregated $2,449.4 million (including $2,104.5 million for the Liberty Global Group and $344.9 million for the LiLAC Group), $2,313.9 million (including $2,066.6 million for the Liberty Global Group and $247.3 million for the LiLAC Group) and $2,160.0 million (including $1,928.0 million for the Liberty Global Group and $232.0 million for the LiLAC Group) during 2016, 2015 and 2014, respectively.

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.

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 2016, 2015 and 2014, 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 under non-cancellable operating lease arrangements amounted to $250.6 million (including $205.2 million for the Liberty Global Group and $45.4 million for the LiLAC Group), $219.0 million (including $204.7 million for the Liberty Global Group and $14.3 million for the LiLAC Group) and $268.3 million (including $252.0 million for the Liberty Global Group and $16.3 million for the LiLAC Group) during 2016, 2015 and 2014, 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. Our aggregate expense for matching contributions under the various defined contribution employee benefit plans was $76.8 million (including $70.4 million for the Liberty Global Group and $6.4 million for the LiLAC Group), $76.7 million (including $75.0 million for the Liberty Global Group and $1.7 million for the LiLAC Group) and $63.2 million (including $61.7 million for the Liberty Global Group and $1.5 million for the LiLAC Group) during 2016, 2015 and 2014, 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-in-principle 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 intends to defend itself vigorously in the resumed proceedings and does not expect an outcome before the end of 2017. 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 responsible for damages in excess of €20.0 million ($21.1 million). We do not expect the ultimate resolution of this matter to have 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 ($80 million) for 2012) by approximately two-thirds and the return of similarly calculated overpayments from 2009 through the ultimate settlement date, plus accrued interest. In October 2016, the first instance court dismissed this action. We have appealed this decision, however, 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.

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 (**PRTC**) 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 PRTC 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). In July 2016, the judge presiding over the PRTC Claim in the United States District Court for the District of Maine (the **District Court**) granted OneLink summary judgment that dismissed the PRTC Claim in its entirety. PRTC filed an appeal of the District Court's decision with the United States First Circuit Court of Appeals. Based on our assessment of the PRTC Claim on appeal and the Class Action Claim, we have determined that the possibility of loss is remote. As a result, we will not report on this matter in future filings. In connection with the July 2016 decision, we have released our previously-recorded provision and related indemnification asset associated with the PRTC Claim, resulting in a $5.1 million reduction to our SG&A expenses during the third quarter of 2016. In December 2016, we received $7.5 million related to the reimbursement of legal fees we incurred in connection with the PRTC Claim, resulting in a reduction to our SG&A expenses during the fourth quarter of 2016 and the release of the former owners of OneLink from their obligations under the indemnification agreement entered into in connection with the OneLink Acquisition.

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).

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, on March 1, 2016, Orange Belgium NV (**Orange Belgium**), formerly known as Mobistar SA, launched a commercial offer combining a cable TV package and broadband internet access for certain of their mobile customers. 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 and 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 was adopted on February 19, 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 2014, Telenet and wireless operator Orange Belgium each filed an appeal with the Brussels Court of Appeal against the initial retail minus decisions. These appeals are still pending. On April 25, 2016, Telenet also filed an appeal with the Brussels Court of Appeal challenging the February 19, 2016 retail minus decision. 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. Certain countries in the European Union (**E.U.**), including 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 participating countries. Although there continues to be ongoing discussions in the relevant countries around the FTT, uncertainty remains as to if and when the FTT will 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 2018. 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 £46.6 million ($57.5 million) as of December 31, 2016. 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 timing of the court's decision is uncertain.

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 on May 1, 2014, impacted our company and some of our competitors. 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 February 2016, our DTH operations in Luxembourg received a second 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 assessed our DTH operations with an obligation to pay VAT for the years audited of HUF 5,413.2 million ($18.5 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. In October 2016, a Budapest court disagreed with the tax authorities and dismissed the assessment. On February 2, 2017, the Hungarian tax authorities appealed the Budapest court decision to the Hungarian Supreme Court. No portion of this exposure has been accrued by us as the likelihood of loss is not considered to be probable.

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 E.U. 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.

Effective April 1, 2017, the rateable value of our existing network and other assets in the U.K. increased significantly. This increase affects the amount we pay for network infrastructure charges as the annual amount payable to the U.K. government is calculated by applying a percentage multiplier to the rateable value of assets. This change, together with a similar change in Ireland, will result in significant increases in our network infrastructure charges. We estimate that the aggregate amount of these increases will be approximately £30 million ($37 million) during 2017 and will build to a maximum aggregate increase of up to £100 million ($123 million) in 2021. We continue to believe that these increases are excessive and retain the right of appeal should more favorable agreements be reached with other operators. The rateable value of network and other assets constructed under our network extension program in the U.K. remains subject to review by the Valuation Office Agency.

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, withholding 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.

(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 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. A reconciliation of total segment Adjusted OIBDA to our earnings (loss) from continuing operations before income taxes is presented below.

As of December 31, 2016, our reportable segments are as follows:

- European Division:
  - U.K./Ireland
  - Belgium
  - The Netherlands (through the completion of the Dutch JV Transaction)
  - Germany
  - Switzerland/Austria
  - Central and Eastern Europe
- LiLAC Division:
  - CWC
  - Chile
  - Puerto Rico

On December 31, 2016, we completed the Dutch JV Transaction, whereby we contributed Ziggo Group Holding (including Ziggo Sport) to the Dutch JV. Accordingly, our results of operations include the operations of Ziggo Group Holding and Ziggo Sport for all periods presented while our December 31, 2016 consolidated balance sheet excludes such entities. In our segment presentation, Ziggo Group Holding (exclusive of Ziggo Sport, which became a subsidiary of Ziggo Group Holding in October 2016) is separately reported as "*The Netherlands*" and Ziggo Sport is included in our "*Corporate and Other*" category. Beginning with the first quarter of 2017, we expect to present the Dutch JV as a reportable segment. For additional information regarding the Dutch JV Transaction, see note 5 to our consolidated financial statements.

All of the reportable segments set forth above derive their revenue primarily from residential and B2B services, including video, broadband internet and fixed-line telephony services and, with the exception of Puerto Rico, mobile services. At December 31, 2016, our operations in the European Division provided residential and B2B services in 11 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 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 Division. In addition, our LiLAC Division provides residential and B2B services in (a) 18 countries, all but one of which are located in Latin America and the Caribbean, through CWC, (b) Chile through VTR and (c) Puerto Rico through Liberty Puerto Rico. CWC also provides (1) B2B services in certain other countries in Latin America and the Caribbean and (2) wholesale services over its sub-sea and terrestrial networks that connect over 30 markets in that region. The corporate and other category for the Liberty Global Group includes less significant consolidated operating segments that provide programming and other services, including Ziggo Sport through December 31, 2016. Intersegment eliminations primarily represent the elimination of intercompany transactions between our broadband communications and programming operations. Inter-group eliminations 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, Liberty Puerto Rico and certain subsidiaries of CWC that are not wholly owned, 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, certain subsidiaries of CWC and other less significant majority-owned subsidiaries are reflected in net earnings or loss attributable to noncontrolling interests in our consolidated statements of operations. For additional information, see note 1.

	Year ended December 31,					
	2016		2015		2014	
	Revenue	Adjusted OIBDA	Revenue	Adjusted OIBDA	Revenue	Adjusted OIBDA
	in millions					
Liberty Global Group:						
European Division:						
U.K./Ireland	$ 6,508.8	$ 2,930.9	$ 7,058.7	$ 3,162.1	$ 7,409.9	$ 3,235.7
Belgium (a)	2,691.1	1,173.4	2,021.0	990.3	2,279.4	1,125.0
The Netherlands (b)	2,690.8	1,472.7	2,745.3	1,519.5	1,498.5	857.9
Germany	2,539.7	1,586.4	2,399.5	1,502.1	2,711.5	1,678.2
Switzerland/Austria	1,755.6	1,069.3	1,758.2	1,040.1	1,846.1	1,056.4
Total Western Europe	16,186.0	8,232.7	15,982.7	8,214.1	15,745.4	7,953.2
Central and Eastern Europe	1,088.4	471.5	1,066.6	474.0	1,259.5	583.0
Central and other	(8.0)	(327.2)	(5.4)	(289.2)	(7.1)	(282.7)
Total European Division	17,266.4	8,377.0	17,043.9	8,398.9	16,997.8	8,253.5
Corporate and other	66.7	(213.3)	42.3	(222.6)	70.8	(212.0)
Intersegment eliminations (c)	(48.1)	—	(23.5)	—	(24.9)	4.0
Total Liberty Global Group	17,285.0	8,163.7	17,062.7	8,176.3	17,043.7	8,045.5
LiLAC Group:						
LiLAC Division:						
CWC (d)	1,444.8	541.9	—	—	—	—
Chile	859.5	339.3	838.1	328.1	898.5	351.0
Puerto Rico (e)	420.8	211.8	379.2	167.2	306.1	128.9
Total LiLAC Division	2,725.1	1,093.0	1,217.3	495.3	1,204.6	479.9
Intersegment eliminations	(1.3)	—	—	—	—	—
Corporate	—	(8.9)	—	(4.3)	—	(3.1)
Total LiLAC Group	2,723.8	1,084.1	1,217.3	491.0	1,204.6	476.8
Total	$ 20,008.8	$ 9,247.8	$ 18,280.0	$ 8,667.3	$ 18,248.3	$ 8,522.3

(a) The amounts presented for 2016 include the post-acquisition revenue and Adjusted OIBDA of BASE, which was acquired on February 11, 2016.

(b) The amounts presented for 2014 exclude the pre-acquisition revenue and Adjusted OIBDA of Ziggo, which was acquired on November 11, 2014.

(c) Amounts are primarily related to transactions between our European Division and our programming operations.

(d) The amounts presented for 2016 reflect the post-acquisition revenue and Adjusted OIBDA of CWC, which was acquired on May 16, 2016.

(e) The amounts presented for 2015 exclude the pre-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 earnings (loss) from continuing operations before income taxes:

	Year ended December 31,		
	2016	2015	2014
		in millions	
Total segment Adjusted OIBDA from continuing operations	$ 9,247.8	$ 8,667.3	$ 8,522.3
Share-based compensation expense	(296.9)	(318.2)	(257.2)
Depreciation and amortization	(5,801.1)	(5,825.8)	(5,500.1)
Impairment, restructuring and other operating items, net	(348.5)	(174.1)	(536.8)
Operating income	2,801.3	2,349.2	2,228.2
Interest expense	(2,638.4)	(2,441.4)	(2,544.7)
Gains on derivative instruments, net	845.1	847.2	88.8
Foreign currency transaction losses, net	(290.0)	(1,149.2)	(836.5)
Gains (losses) due to changes in fair values of certain investments and debt, net	(461.5)	124.5	205.2
Losses on debt modification and extinguishment, net	(237.2)	(388.0)	(186.2)
Gain on Dutch JV Transaction	520.8	—	—
Other income (expense), net	9.3	(26.9)	(10.7)
Earnings (loss) from continuing operations before income taxes	$ 549.4	$ (684.6)	$ (1,055.9)

Balance Sheet Data of our Reportable Segments

Selected balance sheet data of our reportable segments is set forth below:

	Long-lived assets		Total assets	
	December 31,		December 31,	
	2016	2015	2016	2015
	in millions			
Liberty Global Group:				
European Division:				
U.K./Ireland	$ 16,287.4	$ 19,789.9	$ 20,445.8	$ 23,523.6
Belgium	4,961.8	3,674.9	5,724.7	4,457.7
The Netherlands	—	14,741.7	—	15,103.2
Germany	7,388.9	7,898.9	7,937.2	8,578.5
Switzerland/Austria	5,054.3	5,108.0	5,415.3	5,438.6
Total Western Europe	33,692.4	51,213.4	39,523.0	57,101.6
Central and Eastern Europe	2,262.4	2,268.0	2,360.7	2,357.5
Central and other (a)	676.7	543.9	9,753.1	1,541.1
Total European Division	36,631.5	54,025.3	51,636.8	61,000.2
Corporate and other	107.8	119.7	2,881.1	3,331.3
Total Liberty Global Group	36,739.3	54,145.0	54,517.9	64,331.5
LiLAC Group:				
LiLAC Division:				
CWC	9,534.8	—	10,934.7	—
Chile	993.9	873.7	1,500.6	1,506.6
Puerto Rico	1,355.6	1,347.8	1,465.9	1,469.4
Total LiLAC Division	11,884.3	2,221.5	13,901.2	2,976.0
Corporate	120.9	120.9	290.9	262.1
Total LiLAC Group	12,005.2	2,342.4	14,192.1	3,238.1
Inter-group eliminations	—	—	(25.9)	(10.6)
Total	$ 48,744.5	$ 56,487.4	$ 68,684.1	$ 67,559.0

(a) The total asset amount at December 31, 2016 includes our equity method investment in the Dutch JV and related receivables.

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 ended December 31,		
	2016	2015	2014
		in millions	
Liberty Global Group:			
European Division:			
U.K./Ireland	$ 1,761.1	$ 1,527.3	$ 1,506.7
Belgium (a)	588.4	371.6	448.9
The Netherlands (b)	588.9	536.1	268.0
Germany	594.3	535.7	574.5
Switzerland/Austria	368.7	315.6	327.2
Total Western Europe	3,901.4	3,286.3	3,125.3
Central and Eastern Europe	330.5	277.3	264.8
Central and other	387.2	280.7	257.9
Total European Division	4,619.1	3,844.3	3,648.0
Corporate and other	19.5	65.9	5.0
Total Liberty Global Group	4,638.6	3,910.2	3,653.0
LiLAC Group:			
CWC (c)	282.6	—	—
Chile	194.6	149.0	195.8
Puerto Rico (d)	91.0	78.1	60.4
Total LiLAC Group	568.2	227.1	256.2
Total property and equipment additions	5,206.8	4,137.3	3,909.2
Assets acquired under capital-related vendor financing arrangements	(2,064.2)	(1,481.5)	(975.3)
Assets acquired under capital leases	(111.6)	(106.1)	(127.2)
Changes in current liabilities related to capital expenditures	(386.7)	(50.2)	(122.3)
Total capital expenditures	$ 2,644.3	$ 2,499.5	$ 2,684.4

____

(a) The amount presented at December 31, 2016 includes the post-acquisition property and equipment additions of BASE, which was acquired on February 11, 2016.

(b) The amount presented at December 31, 2014 excludes the pre-acquisition property and equipment additions of Ziggo, which was acquired on November 11, 2014.

(c) The amount presented at December 31, 2016 reflects the post-acquisition property and equipment additions of CWC, which was acquired on May 16, 2016.

(d) The amount presented at December 31, 2015 excludes the pre-acquisition property and equipment additions of Choice, which was acquired on June 3, 2015.

Revenue by Major Category

Our revenue by major category is set forth below:

	Year ended December 31,		
	2016	2015	2014
		in millions	
Subscription revenue (a):			
Video	$ 6,378.0	$ 6,380.1	$ 6,535.7
Broadband internet	5,309.4	5,073.4	4,713.6
Fixed-line telephony	3,018.6	3,160.9	3,258.9
Cable subscription revenue	14,706.0	14,614.4	14,508.2
Mobile (b)	1,706.4	1,037.3	1,085.6
Total subscription revenue	16,412.4	15,651.7	15,593.8
B2B revenue (c)	2,156.3	1,580.2	1,515.9
Other revenue (b) (d)	1,440.1	1,048.1	1,138.6
Total	$ 20,008.8	$ 18,280.0	$ 18,248.3

____

(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 $313.4 million, $212.7 million and $245.0 million during 2016, 2015 and 2014, 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 subscription revenue, aggregated $491.8 million, $319.2 million and $216.5 million during 2016, 2015 and 2014, respectively.

(d) Other revenue includes, among other items, interconnect fees, mobile handset sales, channel carriage fees and installation fees.

Geographic Segments

The revenue of our geographic segments is set forth below:

	Year ended December 31,		
	2016	2015	2014
		in millions	
Liberty Global Group:			
European Division:			
U.K.	$ 6,070.4	$ 6,663.3	$ 6,941.1
Belgium (a)	2,691.1	2,021.0	2,279.4
The Netherlands (b)	2,690.8	2,745.3	1,498.5
Germany	2,539.7	2,399.5	2,711.5
Switzerland	1,377.3	1,390.3	1,414.4
Ireland	438.4	395.4	468.8
Poland	391.4	399.7	469.9
Austria	378.3	367.9	431.7
Hungary	273.1	258.5	310.2
The Czech Republic	180.4	176.6	221.0
Romania	169.9	158.1	173.3
Slovakia	58.4	59.3	74.5
Other	7.2	9.0	3.5
Total European Division	17,266.4	17,043.9	16,997.8
Other, including intersegment eliminations	18.6	18.8	45.9
Total Liberty Global Group	17,285.0	17,062.7	17,043.7
LiLAC Group:			
LiLAC Division:			
CWC (c):			
Panama	414.8	—	—
Jamaica	202.9	—	—
Bahamas	181.5	—	—
Barbados	143.1	—	—
Trinidad and Tobago	103.0	—	—
Other (d)	399.5	—	—
Total CWC	1,444.8	—	—
Chile	859.5	838.1	898.5
Puerto Rico (e)	420.8	379.2	306.1
Total LiLAC Division	2,725.1	1,217.3	1,204.6
Intersegment eliminations	(1.3)	—	—
Total LiLAC Group	2,723.8	1,217.3	1,204.6
Total	$ 20,008.8	$ 18,280.0	$ 18,248.3

(a) The amount presented for 2016 includes the post-acquisition revenue of BASE, which was acquired on February 11, 2016.

(b) The amount presented for 2014 excludes the pre-acquisition revenue of Ziggo, which was acquired on November 11, 2014.

(c) The amount presented for 2016 reflects the post-acquisition revenue of CWC, which was acquired on May 16, 2016. For each CWC jurisdiction, the amounts presented include (i) revenue from residential and B2B operations and (ii) revenue derived from wholesale network customers, as applicable.

(d) The amount presented for 2016 relates to other countries in which CWC operates, which are primarily located in Latin America and the Caribbean, and includes (i) revenue from residential and B2B operations, (ii) revenue from wholesale network customers and (iii) intercompany eliminations.

(e) The amount presented for 2015 excludes the pre-acquisition revenue of Choice, which was acquired on June 3, 2015.

The long-lived assets of our geographic segments are set forth below:

	December 31, 2016	December 31, 2015
	in millions	
Liberty Global Group:		
European Division:		
U.K.	$ 15,638.7	$ 19,127.8
Germany	7,388.9	7,898.9
Belgium	4,961.8	3,674.9
Switzerland	4,057.3	4,117.7
Austria	997.0	990.3
Poland	840.9	893.2
Ireland	648.7	662.1
The Czech Republic	529.1	534.8
Hungary	519.4	494.4
Romania	228.2	194.0
Slovakia	109.6	103.2
The Netherlands	—	14,741.7
Other (a)	711.9	592.3
Total European Division	36,631.5	54,025.3
U.S. and other (b)	107.8	119.7
Total Liberty Global Group	36,739.3	54,145.0
LiLAC Group:		
CWC:		
Panama	2,330.0	—
Networks (c)	1,547.1	—
Trinidad and Tobago	1,024.5	—
Jamaica	943.3	—
Bahamas	869.1	—
Barbados	645.1	—
Other (d)	2,175.7	—
Total CWC	9,534.8	—
Puerto Rico	1,355.6	1,347.8
Chile	993.9	873.7
Corporate	120.9	120.9
Total LiLAC Group	12,005.2	2,342.4
Total	$ 48,744.5	$ 56,487.4

____

(a) Primarily represents long-lived assets of the European Division's central operations, which are located in the Netherlands.

(b) Primarily represents the long-lived assets of our corporate offices.

(c) Represents long-lived assets related to CWC's sub-sea and terrestrial network that connects over 30 markets in Latin America and the Caribbean.

(d) The amount presented at December 31, 2016 includes long-lived assets of CWC's other operations, which are primarily located in the Caribbean.

(19) Quarterly Financial Information (Unaudited)

	2016			
	1st quarter	2nd quarter	3rd quarter	4th quarter
	in millions, except per share amounts			
Revenue	$ 4,588.0	$ 5,074.1	$ 5,207.2	$ 5,139.5
Operating income	$ 586.6	$ 487.8	$ 902.7	$ 824.2
Net earnings (loss) attributable to Liberty Global shareholders	$ (369.1)	$ 101.4	$ (249.5)	$ 2,222.5
Basic earnings (loss) attributable to Liberty Global shareholders per share (note 3):				
Liberty Global Shares	$ (0.39)	$ 0.23	$ (0.18)	$ 2.47
LiLAC Shares	$ (0.88)	$ (2.04)	$ (0.47)	$ (0.07)
Diluted earnings (loss) attributable to Liberty Global shareholders per share (note 3):				
Liberty Global Shares	$ (0.39)	$ 0.23	$ (0.18)	$ 2.45
LiLAC Shares	$ (0.88)	$ (2.04)	$ (0.47)	$ (0.07)

	2015			
	1st quarter	2nd quarter	3rd quarter	4th quarter
	in millions, except per share amounts			
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) Subsequent Events

Virgin Media Refinancing Transactions

In January 2017, Virgin Media Secured Finance issued £675.0 million ($833.3 million) principal amount of 5.0% senior secured notes due April 15, 2027 (the **April 2027 VM Senior Secured Notes**). The net proceeds from the April 2027 VM Senior Secured Notes were used to repay in full the outstanding principal amount under the April 2021 VM Sterling Senior Secured Notes.

Subject to the circumstances described below, the April 2027 VM Senior Secured Notes are non-callable until April 15, 2022. At any time prior to April 15, 2022, Virgin Media Secured Finance may redeem some or all of the April 2027 VM Senior Secured Notes by paying a "make-whole" premium, which is the present value of all remaining scheduled interest payments to April 15, 2022 using the discount rate (as specified in the indenture) as of the redemption date plus 50 basis points.

Virgin Media Secured Finance may redeem some or all of the April 2027 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 indenture), if any, to the applicable redemption date, as set forth below:

	Redemption price
12-month period commencing April 15:	
2022	102.500%
2023	101.250%
2024	100.625%
2025 and thereafter	100.000%

In February 2017, Virgin Media SFA Finance Limited entered into a new £865.0 million ($1,067.9 million) term loan facility (**VM Facility J**). VM Facility J matures on January 31, 2026, bears interest at a rate of LIBOR + 3.50% and is subject to a LIBOR floor of 0.0%. The net proceeds from VM Facility J were used to repay in full the outstanding principal amount under VM Facility E.

In February 2017, Virgin Media Secured Finance launched an offer (the **Exchange Offer**) to exchange the January 2021 VM Sterling Senior Secured Notes for new senior secured notes due January 15, 2025 (the **2025 VM 6.0% Sterling Senior Secured Notes**). The Exchange Offer was consummated on March 21, 2017 and £521.3 million ($643.6 million) aggregate principal amount of the January 2021 VM Sterling Senior Secured Notes were exchanged for £521.3 million ($643.6 million) aggregate principal amount of the 2025 VM 6.0% Sterling Senior Secured Notes. Interest on the 2025 VM 6.0% Sterling Senior Secured Notes will initially accrue at a rate of 6.0% up to January 15, 2021, and at a rate of 11.0% thereafter. The January 2021 VM Sterling Senior Secured Notes were exchanged for the 2025 VM 6.0% Sterling Senior Secured Notes in a non-cash transaction, other than the payment of accrued and unpaid interest on the exchanged January 2021 VM Sterling Senior Secured Notes.

Subject to the circumstances described below, the 2025 VM 6.0% Sterling Senior Secured Notes are non-callable until January 15, 2021. At any time prior to January 15, 2021, Virgin Media Secured Finance may redeem some or all of the 2025 VM 6.0% Sterling Senior Secured Notes by paying a "make-whole" premium, which is the present value of all remaining scheduled interest payments to January 15, 2021 using the discount rate (as specified in the indenture) as of the redemption date plus 50 basis points.

Virgin Media Secured Finance may redeem some or all of the 2025 VM 6.0% Sterling 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 indenture), if any, to the applicable redemption date, as set forth below:

	Redemption price
12-month period commencing January 15:	
2021	105.000%
2022	102.500%
2023 and thereafter	100.000%

UPC Holding Refinancing Transaction

In February 2017, UPC Financing entered into a new $2,150.0 million term loan facility (**UPC Facility AP**). UPC Facility AP was issued at 99.75% of par, matures on April 15, 2025, bears interest at a rate of LIBOR + 2.75% and is subject to a LIBOR floor of 0.0%. The net proceeds from UPC Facility AP, in conjunction with existing cash, were used to repay in full the outstanding principal amount under UPC Facility AN.

Telenet Refinancing Transaction

In April 2017, (i) Telenet International entered into a new €1,330.0 million ($1,402.8 million) term loan facility (**Telenet Facility AH**), which was issued at 99.75% of par, matures on March 31, 2026, bears interest at a rate of EURIBOR + 3.00% and is subject to a EURIBOR floor of 0.0%, and (ii) Telenet Financing USD LLC, a wholly-owned subsidiary of Telenet, entered into a new $1,800.0 million term loan facility (**Telenet Facility AI**), which was issued at 99.75% of par, matures on June 30, 2025, bears interest at a rate of LIBOR plus 2.75% and is subject to a LIBOR floor of 0.0%. The net proceeds from Telenet Facility AH and Telenet Facility AI will be used to prepay (a) the €1,600.0 million ($1,687.6 million) outstanding principal amount under Telenet Facility AE and (b) the $1,500.0 million outstanding principal amount under Telenet Facility AF.

(21) Supplemental Companies Act Disclosures

Fair Value of Acquisitions

2016 Acquisition — CWC

The details of CWC's book value compared to fair value on the May 16, 2016 acquisition date are set forth below:

	Book value	Valuation adjustments	Opening balance sheet fair value
		in millions	
Cash and cash equivalents	$ 210.8	$ —	$ 210.8
Other current assets	582.2	1.0	583.2
Property and equipment, net	2,907.2	0.9	2,908.1
Goodwill	5,559.8	(15.5)	5,544.3
Intangible assets subject to amortization, net	1,268.5	(2.5)	1,266.0
Other assets, net	581.5	(2.3)	579.2
Current portion of debt and capital lease obligations	(92.2)	(2.0)	(94.2)
Other accrued and current liabilities	(743.5)	(6.6)	(750.1)
Long-term debt and capital lease obligations	(3,287.8)	(20.2)	(3,308.0)
Other long-term liabilities	(850.8)	47.2	(803.6)
Noncontrolling interests	(1,451.8)	—	(1,451.8)
Total	$ 4,683.9	$ —	$ 4,683.9

2016 Acquisition — BASE

The details of BASE's book value compared to fair value on the February 11, 2016 acquisition date are set forth below:

	Book value	Valuation adjustments	Opening balance sheet fair value
		in millions	
Cash and cash equivalents	$ 160.1	$ —	$ 160.1
Other current assets	172.6	(24.3)	148.3
Property and equipment, net	785.6	25.8	811.4
Goodwill	343.2	(12.5)	330.7
Intangible assets subject to amortization, net:			
Mobile spectrum	261.0	—	261.0
Customer relationships	127.0	(12.0)	115.0
Trademarks	40.7	—	40.7
Other assets, net	10.7	(0.2)	10.5
Other accrued and current liabilities	(311.8)	21.8	(290.0)
Other long-term liabilities	(91.4)	(2.0)	(93.4)
Total	$ 1,497.7	$ (3.4)	$ 1,494.3

2015 Acquisition — Choice

The details of Choice's book value compared to fair value on the June 3, 2015 acquisition date are set forth below:

	Book value	Valuation adjustments	Opening balance sheet fair value
		in millions	
Cash and cash equivalents	$ 3.6	$ —	$ 3.6
Other current assets	7.6	0.2	7.8
Property and equipment, net	40.1	39.7	79.8
Goodwill	46.8	4.8	51.6
Intangible assets subject to amortization, net	2.9	56.2	59.1
Franchise rights	46.6	101.2	147.8
Other assets, net	0.3	—	0.3
Other accrued and current liabilities	(13.4)	0.2	(13.2)
Non-current deferred tax liabilities	—	(60.4)	(60.4)
Total	$ 134.5	$ 141.9	$ 276.4

2014 Acquisition — Ziggo

The details of Ziggo's book value compared to fair value on the Ziggo Acquisition Date are set forth below:

	Book value	Valuation adjustments	Opening balance sheet fair value
		in millions	
Cash and cash equivalents	$ 1,889.7	$ —	$ 1,889.7
Other current assets	69.6	0.1	69.7
Property and equipment, net	1,938.9	776.0	2,714.9
Goodwill	2,235.7	5,630.8	7,866.5
Intangible assets subject to amortization, net	1,955.5	2,901.5	4,857.0
Other assets, net	347.3	35.5	382.8
Current portion of debt and capital lease obligations	(580.8)	(23.2)	(604.0)
Other accrued and current liabilities	(452.5)	(9.3)	(461.8)
Long-term debt and capital lease obligations	(5,317.6)	(33.9)	(5,351.5)
Other long-term liabilities	(565.2)	(923.4)	(1,488.6)
Noncontrolling interest	(1,080.6)	—	(1,080.6)
Total	$ 440.0	$ 8,354.1	$ 8,794.1

For further information regarding our acquisitions, see note 4.

Investments

Fair Value

Further details of our fair value investments at December 31, 2016 are set forth below:

	Country of incorporation	Parent ownership %	Group ownership %	Holdings
ITV	U.K.	—%	9.9%	Ordinary shares
Sumitomo	Japan	—%	3.7%	Ordinary shares
ITI Neovision	Poland	—%	17.0%	Shares
Lionsgate	Canada	—%	3.4%	Common shares
Other	Various	—%	Various	Various

Equity Method

Further details of our equity method investments at December 31, 2016 are set forth below:

	Country of incorporation	Parent ownership %	Group ownership %	Holdings
Dutch JV	Netherlands	—%	50.0%	Shares
Other	Various	—%	Various	Various

For further information regarding our investments, see note 6.

As further discussed in note 1, in order to comply with the Companies Act, our accounting and the presentation of our consolidated statement of operations for the year ended December 31, 2014 has been adjusted to use the equity method to account for our investment in Ziggo prior to the Ziggo Acquisition.

Changes in our proportionate share of the underlying share capital of an equity method investee, including those which result from the issuance of additional equity securities by such equity investee, are recognized as gains or losses in our consolidated statements of operations.

We continually review all of our equity and cost 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 or cost method investment is deemed to be other than temporary, the cost basis of the security is written down to fair value.

Changes in our investment in Ziggo as accounted for under the equity method of accounting, are set forth below (in millions):

Balance at January 1, 2014 (a)	$ 1,990.6
Share of loss (b)	(68.8)
Use of shares to settle collar arrangement (c)	(496.4)
Increase in investment resulting from gains due to changes in ownership	671.7
Cumulative translation adjustment	(81.7)
Acquisition of controlling interest (d)	(2,015.4)
Balance at December 31, 2014	$ —

(a) At January 1, 2014, the aggregate carrying value of our investment in Ziggo exceeded our proportionate share of Ziggo's net assets by $1,498.5 million. Most of this excess basis was associated with goodwill and was therefore not amortized.

(b) Share of loss is included in other income (expense), net in our consolidated statements of operations.

(c) During 2014, we used 15.7 million Ziggo shares with a basis of $496.4 million and a market value of $754.8 million to settle the Ziggo Collar, resulting in a gain of $258.4 million. For further information, see note 7.

(d) For further information regarding the Ziggo Acquisition, see note 4.

Property and Equipment, Net

Changes in our property and equipment and the related accumulated depreciation are set forth below:

	Cable distribution systems	Customer premises equipment	Support equipment, buildings and land	Total
	in millions			
Cost:				
January 1, 2016	$ 25,485.0	$ 6,452.5	$ 4,802.4	$ 36,739.9
Additions	2,564.9	1,319.7	1,327.6	5,212.2
Acquisitions	3,013.3	58.2	672.6	3,744.1
Retirements and disposals	(4,073.3)	(1,481.4)	(1,094.3)	(6,649.0)
Foreign currency translation adjustments and other	(2,218.0)	(313.7)	(368.0)	(2,899.7)
December 31, 2016	$ 24,771.9	$ 6,035.3	$ 5,340.3	$ 36,147.5
Accumulated depreciation:				
January 1, 2016	$ (9,896.2)	$ (3,077.5)	$ (2,082.2)	$ (15,055.9)
Depreciation	(2,647.8)	(1,070.4)	(833.6)	(4,551.8)
Retirements and disposals	1,921.8	901.9	624.2	3,447.9
Foreign currency translation adjustments and other	877.8	111.2	133.5	1,122.5
December 31, 2016	$ (9,744.4)	$ (3,134.8)	$ (2,158.1)	$ (15,037.3)
Property and equipment, net:				
December 31, 2016	$ 15,027.5	$ 2,900.5	$ 3,182.2	$ 21,110.2

	Cable distribution systems	Customer premises equipment	Support equipment, buildings and land	Total
	in millions			
Cost:				
January 1, 2015	$ 26,012.5	$ 6,213.9	$ 4,298.4	$ 36,524.8
Additions	1,890.0	1,177.7	1,069.2	4,136.9
Acquisitions	71.3	13.7	9.8	94.8
Retirements and disposals	(245.8)	(388.4)	(299.9)	(934.1)
Foreign currency translation adjustments and other	(2,243.0)	(564.4)	(275.1)	(3,082.5)
December 31, 2015	$ 25,485.0	$ 6,452.5	$ 4,802.4	$ 36,739.9
Accumulated depreciation:				
January 1, 2015	$ (8,281.4)	$ (2,656.7)	$ (1,746.1)	$ (12,684.2)
Depreciation	(2,582.6)	(1,094.4)	(824.4)	(4,501.4)
Retirements and disposals	245.8	388.4	299.9	934.1
Foreign currency translation adjustments and other	722.0	285.2	188.4	1,195.6
December 31, 2015	$ (9,896.2)	$ (3,077.5)	$ (2,082.2)	$ (15,055.9)
Property and equipment, net:				
December 31, 2015	$ 15,588.8	$ 3,375.0	$ 2,720.2	$ 21,684.0

The details of our land and buildings are set forth below:

	December 31, 2016	December 31, 2015
	in millions	
Freehold	$ 245.2	$ 356.3
Short leasehold (a)	38.6	50.8
Long leasehold (b)	44.2	32.7
Total	$ 328.0	$ 439.8

(a) Represents property and equipment subject to leases with an initial term of less than 50 years.

(b) Represents property and equipment subject to leases with an initial term of 50 years or more.

For further information regarding our property and equipment, see note 9.

Intangible Assets Subject to Amortization, Net

Changes in our intangible assets and the related accumulated amortization are set forth below:

	Customer relationships	Licenses	Trademarks	Other	Total
			in millions		
Cost:					
January 1, 2016	$ 10,434.3	$ 69.2	$ 113.1	$ 23.2	$ 10,639.8
Acquisitions	1,274.9	334.2	73.7	—	1,682.8
Retirements and disposals	(4,118.0)	(1.5)	(0.1)	—	(4,119.6)
Foreign currency translation adjustments and other	(788.5)	(26.2)	(7.2)	(1.1)	(823.0)
December 31, 2016	$ 6,802.7	$ 375.7	$ 179.5	$ 22.1	$ 7,380.0
Accumulated amortization:					
January 1, 2016	$ (3,442.4)	$ (12.8)	$ (89.5)	$ (2.6)	$ (3,547.3)
Amortization	(1,157.1)	(45.6)	(3.9)	(42.7)	(1,249.3)
Retirements and disposals	712.1	0.7	0.1	—	712.9
Foreign currency translation adjustments and other	322.8	(3.7)	0.1	42.2	361.4
December 31, 2016	$ (3,564.6)	$ (61.4)	$ (93.2)	$ (3.1)	$ (3,722.3)
Intangible assets subject to amortization, net:					
December 31, 2016	$ 3,238.1	$ 314.3	$ 86.3	$ 19.0	$ 3,657.7

	Customer relationships	Licenses	Trademarks	Other	Total
			in millions		
Cost:					
January 1, 2015	$ 12,142.5	$ 77.4	$ 110.2	$ 47.8	$ 12,377.9
Acquisitions	73.7	—	22.0	—	95.7
Retirements and disposals	(678.5)	—	(7.9)	(0.9)	(687.3)
Foreign currency translation adjustments and other	(1,103.4)	(8.2)	(11.2)	(23.7)	(1,146.5)
December 31, 2015	$ 10,434.3	$ 69.2	$ 113.1	$ 23.2	$ 10,639.8
Accumulated amortization:					
January 1, 2015	$ (3,056.3)	$ (12.1)	$ (96.2)	$ (23.5)	$ (3,188.1)
Amortization	(1,310.5)	(1.7)	(11.3)	(0.9)	(1,324.4)
Retirements and disposals	678.5	—	7.9	0.9	687.3
Foreign currency translation adjustments and other	245.9	1.0	10.1	20.9	277.9
December 31, 2015	$ (3,442.4)	$ (12.8)	$ (89.5)	$ (2.6)	$ (3,547.3)
Intangible assets subject to amortization, net:					
December 31, 2015	$ 6,991.9	$ 56.4	$ 23.6	$ 20.6	$ 7,092.5

For further information regarding our intangible assets subject to amortization, see note 9.

Provisions

Changes in our provisions are set forth below:

	Tax liabilities	Restructuring liabilities	Post-retirement liabilities	Asset retirement obligations	Other	Total
			in millions			
January 1, 2016	$ 470.8	$ 146.5	$ 126.4	$ 63.8	$ 131.5	$ 939.0
Acquisitions	39.3	17.3	63.9	40.7	57.1	218.3
Disposal	—	(28.6)	(4.9)	(5.2)	(12.4)	(51.1)
Charges (credits) to consolidated statement of operations	(120.5)	189.1	(9.7)	4.1	(3.2)	59.8
Payments	(0.5)	(164.9)	(32.0)	(0.1)	—	(197.5)
Other comprehensive earnings	—	—	13.5		—	13.5
Foreign currency translation adjustments and other	2.2	(15.8)	15.9	(7.0)	(15.5)	(20.2)
December 31, 2016	$ 391.3	$ 143.6	$ 173.1	$ 96.3	$ 157.5	$ 961.8

For further information regarding our tax liabilities and restructuring liabilities, see notes 11 and 14, respectively.

Employees

The details of our full-time equivalent employees are as follows:

	December 31, 2016	December 31, 2015
Country operations	39,400	35,600
Corporate	1,600	1,400
Total	41,000	37,000

The details of our personnel costs, including share-based compensation expense, are as follows:

	Year ended December 31, 2016	Year ended December 31, 2015
	in millions	
Wages and salaries	$ 2,355.8	$ 2,110.4
Share-based compensation expense	296.9	318.2
Social security costs	269.6	254.2
Pension and other post-retirement expense	78.2	80.5
Employee benefits and other	241.9	210.9
Total	$ 3,242.4	$ 2,974.2

Directors' Remuneration

A discussion of our directors' remuneration appears in the *Directors' Remuneration Report* included in this report.

Audit Fees and All Other Fees

The following table presents fees for professional audit services rendered by KPMG LLP and its international affiliates (including KPMG LLP (U.K.)) during 2016 for the audit of our consolidated financial statements and the separate financial statements of certain of our subsidiaries and for other services rendered by KPMG LLP and its international affiliates.

Fees billed in currencies other than U.S. dollars were translated into U.S. dollars at the average exchange rate in effect during 2016 (in millions).

Audit fees for these financial statements (a)	$ 19.5
Audit fees for financial statements of subsidiaries pursuant to legislation	3.1
Total audit fees	22.6
All other non-audit fees (b)	3.3
Total all services	$ 25.9

(a) Represents audit fees for our consolidated financial statements, including inseparable internal control and other audit procedures performed during interim reviews.

(b) Primarily relates to (i) audit services performed in connection with the acquisition of CWC (which we reimbursed to CWC), (ii) accounting consultation services performed in connection with the acquisition of CWC, (iii) accounting consultation services associated with the application of SEC rules and regulations, (iv) other assurance and attest services not required by statute or regulations, (v) international tax compliance services for various subsidiaries of CWC, (vi) global mobility tax compliance services provided to employees of CWC in non-financial reporting oversight roles, (vii) services related to our additional network investment in the U.K., (viii) attest services provided for a data center of CWC in the Cayman Islands and (ix) environmental and sustainability services.

(22) Supplemental Companies Act Disclosures - Subsidiaries

At December 31, 2016, our subsidiaries are as follows:

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
Cable and Wireless (Anguilla) Limited	Anguilla	Ordinary	100.0%	Operating	(2)
Kelcom International (Antigua & Barbuda) Limited	Antigua & Barbuda	Common	100.0%	Operating	(3)
Cable & Wireless Antigua & Barbuda Limited	Antigua & Barbuda	Ordinary	100.0%	Operating	(4)
UPC Austria GmbH	Austria	Ordinary	100.0%	Telecoms	(5)
UPC Austria Services GmbH	Austria	Ordinary	100.0%	Telecoms	(5)
UPC Business Austria GmbH	Austria	Ordinary	100.0%	Telecoms	(5)
UPC Cablecom Austria GmbH	Austria	Ordinary	100.0%	Telecoms	(5)
UPC DSL Telecom GmbH	Austria	Ordinary	100.0%	Telecoms	(5)
UPC Oberöstereich GmbH	Austria	Ordinary	100.0%	Telecoms	(5)
UPC Telekabel Wien GmbH	Austria	Ordinary	95.0%	Telecoms	(5)
UPC Telekabel-Fernsehnetz Region Baden Betriebe GmbH	Austria	Ordinary	95.0%	Telecoms	(5)
UPC Telekabel-Fernsehnetz Wiener Neustadt Neunkirchen Betriebs GmbH	Austria	Ordinary	100.0%	Telecoms	(6)
Columbus Communications Limited	Bahamas	Common	100.0%	Holding	(7)
CWC Bahamas Holdings Limited	Bahamas	Common	100.0%	Operating	(8)
Antilles Crossing (Barbados) IBC, Inc.	Barbados	Common	100.0%	Holding	(9)
Cable & Wireless (Barbados) Limited	Barbados	Common	81.0%	Operating	(10)
Cable Jamaica (Barbados) Limited	Barbados	Common	100.0%	Holding	(9)
Caribbean Data Centers (Barbados) Inc.	Barbados	Common	100.0%	Holding	(9)
CNL-CWC Networks Inc.	Barbados	Common	100.0%	Wholesale Solutions/ Operating	(9)
Columbus Acquisitions Inc.	Barbados	Common	100.0%	Holding	(9)
Columbus Antilles (Barbados) Limited	Barbados	Common	100.0%	Holding	(9)
Columbus Capital (Barbados) Limited	Barbados	Common	100.0%	Holding	(9)
Columbus Caribbean Acquisitions Inc.	Barbados	Common	100.0%	Holding	(9)
Columbus Communications Inc.	Barbados	Common	100.0%	Holding	(9)
Columbus Curacao (Barbados) Inc.	Barbados	Common	100.0%	Holding	(9)
Columbus Eastern Caribbean (Barbados) Inc.	Barbados	Common	100.0%	Holding	(9)
Columbus Holdings (Barbados) II SRL	Barbados	Common	100.0%	In Liquidation	(9)
Columbus Holdings (Barbados) SRL	Barbados	Common	100.0%	In Liquidation	(9)
Columbus International Inc.	Barbados	Common	100.0%	Holding	(9)
Columbus International Capital (Barbados) Inc.	Barbados	Common	100.0%	Holding	(9)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
Columbus Investments Inc.	Barbados	Common	100.0%	In Liquidation	(9)
Columbus Jamaica Holdings (Barbados) Inc.	Barbados	Common	100.0%	Holding	(9)
Columbus Networks (Cayman) Holdco Limited	Barbados	Common	100.0%	Holding	(9)
Columbus Networks Finance Company Limited	Barbados	Common	100.0%	Holding	(9)
Columbus Networks Sales, Ltd.	Barbados	Common	100.0%	Operating	(9)
Columbus Networks, Limited	Barbados	Common	100.0%	Operating	(9)
Columbus Telecommunications (Barbados) Limited	Barbados	Common	100.0%	Operating	(11)
Columbus Trinidad (Barbados) Inc.	Barbados	Common	100.0%	Holding	(9)
Columbus TTNW Holdings Inc.	Barbados	Common	100.0%	Holding	(9)
CWC CALA Holdings Limited	Barbados	Common	100.0%	Holding	(10)
CWC-Columbus Asset Holdings Inc.	Barbados	Common	100.0%	Holding	(9)
CWI Caribbean Limited	Barbados	Common	100.0%	Operating	(10)
Gemini North Cable (Barbados) Inc.	Barbados	Common	100.0%	Holding	(9)
Karib Cable Inc.	Barbados	Common	100.0%	Operating	(12)
S.A.U.C.E. Holdings (Barbados) (I) Limited	Barbados	Common	100.0%	In Liquidation	(9)
Wamco Technology Group Limited	Barbados	Common	100.0%	Dormant/no function	(11)
Allo Telecom NV	Belgium	Ordinary	100.0%	Telecoms	(13)
Ortel Mobile NV	Belgium	Ordinary	100.0%	Telecoms	(13)
Telenet BVBA	Belgium	Ordinary / Preferred	100.0%	Telecoms/ Subholding	(14)
Telenet Finance BVBA	Belgium	Ordinary	100.0%	Consumer Financing	(14)
Telenet Group BVBA	Belgium	Ordinary	100.0%	MNO/ Subholding	(13)
Telenet Group Holding N.V.	Belgium	Ordinary/ Preferred	56.0%	Telecoms/ Holding	(14)
Telenet Mobile NV	Belgium	Ordinary	50.0%	Telecoms	(14)
Telenet Tecteo Bidco NV	Belgium	Ordinary	38.0%	Holding	(14)
Telenet Vlaanderen NV	Belgium	Ordinary/ Preferred	50.0%	Telecoms	(14)
T-VGAS NV	Belgium	Ordinary	50.0%	Telecoms	(15)
Cable and Wireless Network Services Limited	Bermuda	Ordinary	100.0%	Wholesale Solutions/ Operating	(16)
New World Network International, Ltd.	Bermuda	Ordinary	100.0%	In Liquidation	(17)
Columbus Networks (Bonaire), N.V.	Bonaire	Ordinary	100.0%	Operating	(18)
CNW Leasing Ltd.	Canada	Common	100.0%	Holding	(19)
CWC Canada Limited	Canada	Common	100.0%	Operating	(20)
Cable & Wireless Communications Insurance Limited	Cayman Islands	Ordinary	100.0%	Holding/ Operating	(21)
Cable & Wireless Jamaica Finance (Cayman) Limited	Cayman Islands	Ordinary	100.0%	Holding	(22)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
Cable and Wireless (Cayman Islands) Limited	Cayman Islands	Ordinary	100.0%	Operating	(23)
CWC Cayman Finance Limited	Cayman Islands	Ordinary	100.0%	Holding	(22)
CWC Costa Rica Holdings Limited	Cayman Islands	Ordinary	100.0%	Holding	(24)
CWC Macau Holdings Limited	Cayman Islands	Ordinary	100.0%	Holding	(24)
CWC Overseas Holdco Limited	Cayman Islands	Ordinary	100.0%	Holding	(24)
CWC Trinidad Holdings Limited	Cayman Islands	Ordinary	100.0%	Operating	(24)
CWC WS Holdings Cayman Ltd.	Cayman Islands	Ordinary	100.0%	Holding	(24)
CWIGroup Limited	Cayman Islands	Ordinary	100.0%	Holding	(24)
LiLAC Ventures Ltd	Cayman Islands	Common	100.0%	Holding	(25)
Kelfenora Limited	Cayman Islands	Ordinary	100.0%	Holding	(22)
LCPR Cayman Holding Inc.	Cayman Islands	Common	100.0%	Holding	(26)
Sable International Finance Limited	Cayman Islands	Ordinary	100.0%	Holding	(24)
United Chile Ventures, Inc.	Cayman Islands	Common	100.0%	Holding	(27)
Sociedad Televisora CBC Limitada	Chile	LLC interests	100.0%	Inactive	(28)
VTR Galaxy Chile S.p.A.	Chile	Common	100.0%	Telecoms	(28)
VTR Global Carrier S.A.	Chile	Common	100.0%	Telecoms	(28)
VTR Ingeniería S.A.	Chile	Common	100.0%	Service	(28)
VTR Movíl S.p.A.	Chile	Common	100.0%	Telecoms	(28)
VTR Southam Chile S.p.A.	Chile	Common	100.0%	Dormant	(28)
VTR.com SpA	Chile	Common	100.0%	Telecoms	(28)
Columbus Networks Zona Franca, Limitada	Colombia	Quotas	100.0%	Operating	(29)
ColumbusNetworks de Colombia, Limitada	Colombia	Quotas	100.0%	Operating	(30)
Lazus Colombia S.A.S.	Colombia	Quotas	100.0%	Operating	(31)
Cable & Wireless (Costa Rica) SA	Costa Rica	Ordinary	100.0%	Holding	(32)
Columbus Networks de Costa Rica S.R.L.	Costa Rica	Quotas	100.0%	Operating	(33)
Columbus Networks Wholesale de Costa Rica S.A.	Costa Rica	Quotas	100.0%	Operating	(34)
CWC (Costa Rica) SA	Costa Rica	Ordinary	100.0%	Holding	(32)
CWC Wholesale Solutions (Costa Rica) SA	Costa Rica	Ordinary	100.0%	Wholesale Solutions	(32)
Columbus Communications Curacao N.V.	Curacao	Ordinary	100.0%	Operating	(35)
Columbus Networks Antilles Offshore N.V.	Curacao	Ordinary	100.0%	Operating	(36)
Columbus Networks Curacao, N.V.	Curacao	Ordinary	100.0%	Operating	(36)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
Columbus Networks Netherlands Antilles N.V.	Curacao	Ordinary	100.0%	Operating	(36)
E-Commercepark N.V.	Curacao	Ordinary	100.0%	Operating	(37)
Exploitatiemaatchappij E-Zone Vredenberg N.V.	Curacao	Ordinary	100.0%	Holding	(37)
UPC Ceska Republica Sro	Czech Republic	no shares (joint-stock) issued, comparable to partnership interest	100.0%	Telecoms/ Holding	(38)
UPC Infrastructure s.r.o	Czech Republic	no shares (joint-stock) issued, comparable to partnership interest	100.0%	Telecoms	(38)
UPC Real Estate s.r.o.	Czech Republic	no shares (joint-stock) issued, comparable to partnership interest	100.0%	Holding	(38)
Cable & Wireless Dominica Limited	Dominica	Ordinary	80.0%	Operating	(39)
Columbus Networks Dominicana, S.A.	Dominican Republic	Ordinary	100.0%	Operating	(40)
CWC Cable & Wireless Communications Dominican Republic SA	Dominican Republic	Ordinary	100.0%	Operating	(41)
Columbus Networks de Ecuador S.A.	Ecuador	Ordinary	100.0%	Operating	(42)
Columbus Networks El Salvador S.A. de C.V.	El Salvador	Ordinary	100.0%	Operating	(43)
Cable & Wireless International HQ Limited	England	Ordinary	100.0%	Holding	(44)
Columbus Holdings France SAS	France	Ordinary	100.0%	Holding	(45)
UPC Broadband France S.A.S.	France	Ordinary	100.0%	Holding	(46)
UPC Broadband France SNC	France	Ordinary	100.0%	Holding	(46)
Arena Sport Rechte und Marketing GmbH	Germany	Ordinary	100.0%	Telecoms	(47)
Unitymedia BW GmbH	Germany	Ordinary	100.0%	Telecoms	(47)
Unitymedia GmbH	Germany	Ordinary	100.0%	Holding	(47)
Unitymedia Hessen GmbH & Co. KG	Germany	Partnership Interests	100.0%	Telecoms	(47)
Unitymedia Hessen Verwaltungs GmbH	Germany	Ordinary	100.0%	Management Company	(47)
Unitymedia International GmbH	Germany	Ordinary	100.0%	Telecoms	(47)
Unitymedia Management GmbH	Germany	Ordinary	100.0%	Telecoms/ Holding	(47)
Unitymedia NRW GmbH	Germany	Ordinary	100.0%	Telecoms	(47)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
Unitymedia Service GmbH	Germany	Ordinary	100.0%	Holding	(47)
Unitymedia Smart Outsourcing GmbH	Germany	Ordinary	100.0%	Holding	(47)
UPC Germany Financing Holding GmbH	Germany	Ordinary	100.0%	Holding	(47)
Cable and Wireless Grenada Limited	Grenada	Ordinary	70.0%	Operating	(48)
Columbus Communications (Grenada) Limited	Grenada	Ordinary	100.0%	Operating	(49)
Columbus Networks de Guatemala, Limitada	Guatemala	Quotas	100.0%	Operating	(50)
Columbus Networks (Haiti) S.A.	Haiti	Ordinary	100.0%	Operating	(51)
Columbus Networks de Honduras S. de R.L.	Honduras	Quotas	100.0%	Operating	(52)
UPC Magyarorszag Kft	Hungary	Ordinary	100.0%	Telecoms	(53)
PT Mitracipta Sarananusa	Indonesia	Common	100.0%	Cold Storage/ Inactive	(54)
Channel 6 Broadcasting Ltd	Ireland	Ordinary	100.0%	Telecoms	(55)
Chorus Communications Ltd.	Ireland	Ordinary	100.0%	Telecoms	(55)
Imminus (Ireland) Limited	Ireland	Ordinary	100.0%	Telecoms	(55)
Kish Media Ltd	Ireland	Ordinary	100.0%	Telecoms	(55)
LGI DTH Ireland	Ireland	Ordinary	100.0%	Holding	(55)
NTL Communications (Ireland) Ltd.	Ireland	Ordinary	100.0%	Telecoms	(55)
NTL Irish Networks Ltd.	Ireland	Ordinary	100.0%	Telecoms	(55)
Tullamore Beta Ltd	Ireland	Ordinary	100.0%	Telecoms	(55)
TV3 Television Network Ltd	Ireland	Ordinary	100.0%	Telecoms	(55)
TVThree Enterprises Ltd	Ireland	Ordinary	100.0%	Telecoms	(55)
TVThree Sales Ltd	Ireland	Ordinary	100.0%	Telecoms	(55)
Ulana Business Management Ltd	Ireland	Ordinary	100.0%	Telecoms	(55)
UPC Broadband Ireland Ltd	Ireland	Ordinary	100.0%	Telecoms	(55)
Virgin Media Ireland Ltd.	Ireland	Ordinary	100.0%	Telecoms	(55)
Pender Insurance Limited	Isle of Man	Ordinary	100.0%	Captive	(56)
Cable & Wireless Jamaica Limited	Jamaica	Ordinary	82.0%	Operating	(57)
Caribbean Landing Company Limited	Jamaica	Ordinary	100.0%	Management company	(57)
Chartfield Development Company Limited	Jamaica	Ordinary	100.0%	Holding	(57)
Columbus Communications Jamaica Limited	Jamaica	Ordinary	100.0%	Operating	(57)
Columbus Networks Jamaica Limited	Jamaica	Ordinary	100.0%	Operating	(57)
D. & L. Cable & Satelitte Network Limited	Jamaica	Ordinary	100.0%	In Liquidation	(57)
Dekal Wireless Jamaica Limited	Jamaica	Ordinary	100.0%	Operating	(57)
Digital Media & Entertainment Limited	Jamaica	Ordinary	100.0%	Operating	(57)
Jamaica Digiport International Limited	Jamaica	Ordinary	100.0%	Operating	(58)
FLOW Foundation Limited	Jamaica	None	100.0%	Foundation	(57)
Northern Cable & Communication Network Limited	Jamaica	Ordinary	100.0%	In Liquidation	(57)
S.A.U.C.E. Communication Network Limited	Jamaica	Ordinary	100.0%	In Liquidation	(57)
Columbus Eastern Caribbean Holdings Sarl	Luxembourg	Ordinary	100.0%	Holding	(59)
Finance Center Telenet Sàrl	Luxembourg	Ordinary	50.0%	Finance	(60)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
Telenet International Finance Sàrl	Luxembourg	Ordinary	50.0%	Holding/ Finance	(60)
Telenet Luxembourg Finance Center Sàrl	Luxembourg	Ordinary	50.0%	Finance	(61)
Telenet Solutions Luxemburg NV	Luxembourg	Ordinary	50.0%	Telecoms	(60)
UPC DTH Leasing Sarl	Luxembourg	Ordinary	100.0%	Telecoms	(60)
UPC DTH Sarl	Luxembourg	Ordinary	100.0%	Telecoms	(60)
UPC DTH Slovakia Sarl	Luxembourg	Ordinary	100.0%	Telecoms	(60)
Liberty Global Holding Company Limited	Malta	Ordinary	100.0%	Holding	(62)
Liberty Global Insurance Company Limited	Malta	Ordinary	100.0%	Holding	(62)
Columbus Networks de Mexico S.R.L.	Mexico	Quotas	100.0%	Operating	(63)
Binan Investments B.V	Netherlands	Ordinary	100.0%	Holding	(64)
Cable & Wireless Australia & Pacific Holding B.V.	Netherlands	Ordinary	100.0%	Active for litigation resolution only	(65)
Cable and Wireless International Finance B.V	Netherlands	Ordinary	100.0%	Holding	(66)
Esprit Telecom BV	Netherlands	Ordinary	100.0%	Telecoms	(67)
Labesa Holding B.V.	Netherlands	Ordinary	100.0%	Holding	(64)
LGCI Holdco I BV	Netherlands	Ordinary	100.0%	Holding	(64)
LGCI Holdco II BV	Netherlands	Ordinary	100.0%	Holding	(64)
LGE Holdco V BV	Netherlands	Ordinary	100.0%	Holding	(67)
LGI Mobile BV	Netherlands	Ordinary	100.0%	Telecoms	(64)
LGI Ventures B.V	Netherlands	Ordinary	100.0%	Holding	(64)
Liberty Global B.V.	Netherlands	Ordinary	100.0%	Holding	(64)
Liberty Global Content Investments BV	Netherlands	Ordinary	100.0%	Holding	(64)
Liberty Global Europe Financing B.V	Netherlands	Ordinary	100.0%	Holding	(64)
Liberty Global Europe Holding B.V	Netherlands	Ordinary	100.0%	Holding	(64)
Liberty Global Europe Investments B.V.	Netherlands	Ordinary	100.0%	Holding	(64)
Liberty Global Europe Management B.V	Netherlands	Ordinary	100.0%	Management Company	(64)
Liberty Global Group Holding BV	Netherlands	Ordinary	100.0%	Holding	(64)
Liberty Global Holding B.V	Netherlands	Ordinary	100.0%	Holding	(64)
Liberty Global Management BV	Netherlands	Ordinary	100.0%	Management Company	(64)
Liberty Global New Ventures B.V	Netherlands	Ordinary	100.0%	Holding	(64)
Liberty Global Operations B.V	Netherlands	Ordinary	100.0%	Operating	(64)
Liberty Global Services B.V	Netherlands	Ordinary	100.0%	Holding	(64)
Liberty Global Ventures Holding BV	Netherlands	Ordinary	100.0%	Holding	(64)
Lila Chile Holdings BV	Netherlands	Ordinary	100.0%	Holding	(64)
Priority Wireless B.V	Netherlands	Ordinary	100.0%	Holding	(64)
Torenspits II BV	Netherlands	Ordinary	100.0%	Telecoms	(67)
UGC Australia BV	Netherlands	Ordinary	100.0%	Holding	(64)
UPC Broadband B.V	Netherlands	Ordinary	100.0%	Holding	(64)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
UPC Broadband Holding B.V.	Netherlands	Ordinary	100.0%	Holding	(64)
UPC CEE Holding BV	Netherlands	Ordinary	100.0%	Holding	(64)
UPC Direct Programming II B.V.	Netherlands	Ordinary	100.0%	Telecoms	(64)
UPC Equipment BV	Netherlands	Ordinary	100.0%	Holding	(64)
UPC Extra II B.V.	Netherlands	Ordinary	100.0%	Holding	(64)
UPC France Holding B.V.	Netherlands	Ordinary	100.0%	Holding	(64)
UPC Germany Holding B.V.	Netherlands	Ordinary	100.0%	Holding	(64)
UPC Holding B.V.	Netherlands	Ordinary	100.0%	Holding	(64)
UPC Holding II B.V.	Netherlands	Ordinary	100.0%	Holding	(64)
UPC International Operations BV	Netherlands	Ordinary	100.0%	Holding	(64)
UPC Poland Holding B.V.	Netherlands	Ordinary	100.0%	Holding	(64)
UPC Switzerland Holding BV	Netherlands	Ordinary	100.0%	Holding	(64)
VodafoneZiggo Group Holding BV	Netherlands	Ordinary	50.0%	Holding	(67)
VTR Finance BV	Netherlands	Ordinary	100.0%	Holding	(64)
Columbus Networks Nicaragua y Compania Limitada	Nicaragua	Ordinary	100.0%	Operating	(68)
Columbus Networks Centroamérica S. de R.L	Panama	Quotas	100.0%	Operating	(69)
Columbus Networks de Panamá SRL	Panama	Quotas	100.0%	Operating	(69)
Columbus Networks Marítima S. de R.L.	Panama	Quotas	100.0%	Operating	(69)
CWC WS (Panama) SA	Panama	Ordinary	100.0%	Wholesale Solutions	(70)
CWC WS Holdings Panama SA	Panama	Ordinary	100.0%	Wholesale Solutions	(70)
Lazus Panama S.A.	Panama	Quotas	100.0%	Operating	(69)
Telecomunicaciones Corporativas Panameñas S.A.	Panama	Quotas	100.0%	Operating	(69)
Lazus Peru S.A.C	Peru	Ordinary	100.0%	Holding	(71)
AWONET Sp Zoo	Poland	Ordinary	100.0%	Telecoms	(72)
UPC Polska Sp. z o.o	Poland	Ordinary	100.0%	Telecoms/ Holding	(73)
Columbus Networks Puerto Rico (2015), Inc.	Puerto Rico	Common	100.0%	Operating	(74)
Liberty Cablevision of Puerto Rico LLC	Puerto Rico	Common	100.0%	Telecoms	(75)
Puerto Rico Cable Acquisition Company LLC	Puerto Rico	Common	100.0%	Telecoms	(75)
Focus Sat Romania Srl (aka Focus Sat Srl)	Romania	Ordinary	100.0%	Telecoms	(76)
UPC External Services S.R.L.	Romania	Ordinary	100.0%	Telecoms	(76)
UPC Romania Srl	Romania	Ordinary	100.0%	Telecoms	(76)
UPC Services S.R.L.	Romania	Ordinary	100.0%	Telecoms	(77)
Cable & Wireless (Seychelles) Limited	Seychelles	Ordinary	100.0%	Operating	(78)
Le Chantier Property Limited	Seychelles	Ordinary	100.0%	Operating	(79)
Cable & Wireless (Singapore) Pte Limited	Singapore	Ordinary	100.0%	Holding	(80)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
UPC Broadband Slovakia sro	Slovak Republic	no shares (joint-stock) issued, comparable to partnership interest	100.0%	Telecoms/ Holding	(81)
Cable & Wireless St. Kitts & Nevis Limited	St Kitts and Nevis	Ordinary	77.0%	Operating	(82)
Antilles Crossing Holding Company (St. Lucia) Limited	St Lucia	Common	100.0%	Holding	(83)
Bandserve Inc.	St Lucia	Common	100.0%	Operating	(83)
Cable and Wireless (St Lucia) Limited	St Lucia	Ordinary	100.0%	Operating	(84)
Columbus Communications (St Lucia) Limited	St Lucia	Common	100.0%	Operating	(83)
Columbus Eastern Caribbean (St. Lucia) Inc.	St Lucia	Common	100.0%	Holding	(83)
Dekal Wireless Holdings Limited	St Lucia	Common	100.0%	Holding	(85)
Techvision Inc.	St Lucia	Common	100.0%	Holding	(83)
Tele (St. Lucia) Inc.	St Lucia	Common	100.0%	Operating	(83)
Cable & Wireless St Vincent and the Grenadines Limited	St Vincent and the Grenadines	Ordinary	100.0%	Operating	(86)
Columbus Communications St. Vincent and the Grenadines Limited	St Vincent and the Grenadines	Common	100.0%	Operating	(87)
Petrel Communications SA	Switzerland	Bearer shares	100.0%	Holding	(88)
Sitel SA	Switzerland	Ordinary/ bearer shares	67.0%	Telecoms	(89)
Teledistal SA	Switzerland	Ordinary/ registered shares	58.0%	Telecoms	(90)
Telelavaux SA	Switzerland	Ordinary/ registered shares	80.0%	Telecoms	(91)
UPC Schweiz GmbH	Switzerland	Ordinary	100.0%	Holding	(92)
Video 2000 SA	Switzerland	Ordinary/ registered shares	60.0%	Telecoms	(93)
Cable & Wireless Trinidad and Tobago Limited	Trinidad and Tobago	Common	100.0%	Inactive	(94)
Cable Company of Trinidad and Tobago Unlimited	Trinidad and Tobago	Common	100.0%	In Liquidation	(95)
Columbus Communications Trinidad Limited	Trinidad and Tobago	Common	100.0%	Operating	(95)
Columbus Holdings Trinidad Unlimited	Trinidad and Tobago	Common	100.0%	In Liquidation	(95)
Columbus Networks International (Trinidad) Ltd.	Trinidad and Tobago	Common	100.0%	Operating	(95)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
Trinidad and Tobago Trans-Cable Company Unlimited	Trinidad and Tobago	Common	100.0%	In Liquidation	(95)
Cable and Wireless (TCI) Limited	Turks and Caicos Islands	Ordinary	100.0%	Operating	(96)
Action Stations (2000) Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
Action Stations (Lakeside) Limited	UK-England & Wales	Ordinary	93.0%	In Liquidation	(97)
Arqiva WiFi Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Avon Cable Investments Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
Avon Cable Joint Venture (P)	UK-England & Wales	Partnership Interests	100.0%	Partnership	(98)
Barnsley Cable Communications Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
BCMV Leasing Limited	UK-England & Wales	Ordinary	100.0%	Leasing	(98)
BCMV Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Birmingham Cable Corporation Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
Birmingham Cable Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Bitbuzz UK Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Blue Yonder Workwise Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Bluebottle Call Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
Bradford Cable Communications Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
Cable & Wireless (UK) Group Limited	UK-England & Wales	Ordinary	100.0%	Holding	(44)
Cable & Wireless Central Holding Limited	UK-England & Wales	Ordinary	100.0%	Holding	(44)
Cable & Wireless DI Holdings Limited	UK-England & Wales	Ordinary	100.0%	Holding	(44)
Cable & Wireless Limited	UK-England & Wales	Ordinary	100.0%	Holding	(44)
Cable & Wireless Trade Mark Management Limited	UK-England & Wales	Ordinary	50.0%	Holding	(44)
Cable Adnet Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
Cable and Wireless (CALA Management Services) Limited	UK-England & Wales	Ordinary	100.0%	Holding	(44)
Cable and Wireless (Investments) Limited	UK-England & Wales	Ordinary	100.0%	Holding	(44)
Cable and Wireless (West Indies) Limited	UK-England & Wales	Ordinary	100.0%	Holding/ Operating	(44)
Cable and Wireless Pension Trustee Limited	UK-England & Wales	Ordinary	100.0%	Holding	(99)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
Cable Camden Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
Cable Communications Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
Cable Enfield Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
Cable Hackney & Islington Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
Cable Haringey Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
Cable Internet Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
Cable London Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Cable on Demand Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
CableTel (UK) Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
CableTel Herts and Beds Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
CableTel Surrey and Hampshire Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
CableTel West Riding Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
Cambridge Holding Company Limited	UK-England & Wales	Ordinary	100.0%	Holding	(98)
Crystal Palace Radio Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
CWC Communications Limited	UK-England & Wales	Ordinary	100.0%	Holding	(44)
CWC UK Finance Limited	UK-England & Wales	Ordinary	100.0%	Holding	(44)
CWIG Limited	UK-England & Wales	Ordinary	100.0%	Holding	(44)
CWIGroup Limited	UK-England & Wales	Ordinary	100.0%	Holding	(44)
Diamond Cable Communications Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Doncaster Cable Communications Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
Eurobell (Holdings) Limited	UK-England & Wales	Ordinary	100.0%	Holding	(98)
Eurobell (South West) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Eurobell (Sussex) Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
Eurobell (West Kent) Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
Eurobell Internet Services Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
Filegale Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
Flextech (1992) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
Flextech Broadband Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Flextech Homeshopping Limited	UK-England & Wales	Ordinary	80.0%	Telecoms	(98)
Flextech Interactive Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
Flextech Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Flextech T Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
General Cable Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
General Cable Group Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
General Cable Investments Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
General Cable Programming Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Global Handset Finco Ltd (1)	UK-England & Wales	Ordinary	100.0%	Mobile Financing	(100)
Halifax Cable Communications Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
Interactive Digital Sales Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
Jewel Holdings	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
M&NW Network II Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
M&NW Network Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Matchco Limited	UK-England & Wales	Ordinary	76.0%	Dormant	(98)
Mayfair Way Management Limited	UK-England & Wales	Ordinary	83.0%	In Liquidation	(97)
Middlesex Cable Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
ntl (Aylesbury and Chiltern) Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl (B) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
ntl (BCM Plan) Pension Trustees Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl (Broadland) Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl (CWC) Corporation Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl (CWC) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
ntl (CWC) UK	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl (South East) Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl (South Hertfordshire) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
ntl (South London) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
ntl (Southampton and Eastleigh) Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
ntl (V)	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl (YorCan) Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl (York) Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Bolton Cablevision Holding Company	UK-England & Wales	Ordinary & Preference	100.0%	Holding	(98)
ntl Business (Ireland) Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
ntl Business Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
ntl CableComms Bolton	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
ntl CableComms Bolton Leasing Limited	UK-England & Wales	Ordinary	100.0%	Leasing	(98)
ntl CableComms Bromley	UK-England & Wales	Ordinary & Preference	100.0%	Telecoms	(98)
ntl CableComms Bromley Leasing Limited	UK-England & Wales	Ordinary	100.0%	Leasing	(98)
ntl CableComms Bury and Rochdale	UK-England & Wales	Ordinary & Preference	100.0%	Telecoms	(98)
ntl CableComms Cheshire	UK-England & Wales	Ordinary & Preference	100.0%	Telecoms	(98)
ntl CableComms Derby	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
ntl CableComms Derby Leasing Limited	UK-England & Wales	Ordinary	100.0%	Leasing	(98)
ntl CableComms East Lancashire	UK-England & Wales	Ordinary & Preference	100.0%	Telecoms	(98)
ntl CableComms Greater Manchester	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
ntl CableComms Greater Manchester Leasing Limited	UK-England & Wales	Ordinary	100.0%	Leasing	(98)
ntl CableComms Group Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
ntl CableComms Holdings No 1 Limited	UK-England & Wales	Ordinary	100.0%	Holding	(98)
ntl CableComms Holdings No 2 Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl CableComms Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
ntl CableComms Macclesfield	UK-England & Wales	Ordinary & Preference	100.0%	Telecoms	(98)
ntl CableComms Manchester Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl CableComms Oldham and Tameside	UK-England & Wales	Ordinary & Preference	100.0%	Telecoms	(98)
ntl CableComms Solent	UK-England & Wales	Ordinary & Preference	100.0%	Telecoms	(98)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
ntl CableComms Staffordshire	UK-England & Wales	Ordinary & Preference	100.0%	Telecoms	(98)
ntl CableComms Stockport	UK-England & Wales	Ordinary & Preference	100.0%	Telecoms	(98)
ntl CableComms Surrey	UK-England & Wales	Ordinary & Preference	100.0%	Telecoms	(98)
ntl CableComms Surrey Leasing Limited	UK-England & Wales	Ordinary	100.0%	Leasing	(98)
ntl CableComms Sussex	UK-England & Wales	Ordinary & Preference	100.0%	Telecoms	(98)
ntl CableComms Sussex Leasing Limited	UK-England & Wales	Ordinary	100.0%	Leasing	(98)
ntl CableComms Wessex	UK-England & Wales	Ordinary & Preference	100.0%	Telecoms	(98)
ntl CableComms Wessex Leasing Limited	UK-England & Wales	Ordinary	100.0%	Leasing	(98)
ntl CableComms Wirral	UK-England & Wales	Ordinary & Preference	100.0%	Telecoms	(98)
ntl CableComms Wirral Leasing Limited	UK-England & Wales	Ordinary	100.0%	Leasing	(98)
ntl Cambridge Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
ntl Chartwell Holdings Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Communications Services Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
ntl Derby Cablevision Holding Company	UK-England & Wales	Ordinary & Preference	100.0%	Holding	(98)
ntl Digital Ventures Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
ntl Funding Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
ntl Glasgow Holdings Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Holdings (Broadland) Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Holdings (Leeds) Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
ntl Holdings (Norwich) Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
ntl Internet Services Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Kirklees	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
ntl Kirklees Holdings Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Manchester Cablevision Holding Company	UK-England & Wales	Ordinary & Preference	100.0%	Holding	(98)
ntl Microclock Services Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Midlands Leasing Limited	UK-England & Wales	Ordinary	100.0%	Leasing	(98)
ntl Midlands Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
ntl National Networks Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
ntl Partcheer Company Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Pension Trustees Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Rectangle Limited	UK-England & Wales	Ordinary	100.0%	Holding	(98)
ntl Sideoffer Limited	UK-England & Wales	Ordinary & Deferred	100.0%	Dormant	(98)
ntl Solent Telephone and Cable TV Company Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl South Central Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl South Wales Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Streetunique Projects Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Streetunit Projects Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Streetusual Services Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Streetvision Services Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Streetvital Services Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Streetwarm Services Limited	UK-England & Wales	Ordinary & Deferred	100.0%	Dormant	(98)
ntl Streetwide Services Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Strikeagent Trading Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Strikeamount Trading Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Strikeapart Trading Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Telecom Services Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Trustees Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl UK Telephone and Cable TV Holding Company Limited	UK-England & Wales	Ordinary & Deferred	100.0%	Dormant	(98)
ntl Victoria II Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Victoria Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
ntl Winston Holdings Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
ntl Wirral Telephone and Cable TV Company	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
ntl Wirral Telephone and Cable TV Company Leasing Limited	UK-England & Wales	Ordinary	100.0%	Leasing	(98)
Omne Telecommunications Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
Sable Holding Limited	UK-England & Wales		100.0%	Holding	(44)
Screenshop Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
Sheffield Cable Communications Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Smallworld Cable Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Smashedatom Limited	UK-England & Wales	Ordinary	60.0%	Dormant	(98)
Southwestern Bell International Holdings Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
Telewest Communications (Central Lancashire) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Telewest Communications (Cotswolds) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Telewest Communications (Cotswolds) Venture (P)	UK-England & Wales	Partnership Interests	100.0%	Partnership	(98)
Telewest Communications (Fylde & Wyre) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Telewest Communications (Liverpool) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Telewest Communications (London South) Joint Venture (P)	UK-England & Wales	Partnership Interests	100.0%	Partnership	(98)
Telewest Communications (London South) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Telewest Communications (Midlands and North West) Leasing Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Telewest Communications (Midlands and North West) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Telewest Communications (Midlands) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Telewest Communications (North East) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Telewest Communications (North East) Partnership (P)	UK-England & Wales	Partnership Interests	100.0%	Partnership	(98)
Telewest Communications (North West) Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
Telewest Communications (South East) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Telewest Communications (South East) Partnership (P)	UK-England & Wales	Partnership Interests	100.0%	Partnership	(98)
Telewest Communications (South Thames Estuary) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Telewest Communications (South West) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Telewest Communications (Southport) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Telewest Communications (St Helens & Knowsley) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Telewest Communications (Telford) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Telewest Communications (Tyneside) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
Telewest Communications (Wigan) Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Telewest Communications Cable Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
Telewest Communications Holdco Limited	UK-England & Wales	Ordinary	100.0%	Holding	(98)
Telewest Communications Holdings Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
Telewest Communications Networks Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Telewest Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Telewest Parliamentary Holdings Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
Telewest Workwise Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
The Cable Corporation Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
The Yorkshire Cable Group Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
Theseus No. 1 Limited	UK-England & Wales	Ordinary	100.0%	Holding	(98)
Theseus No.2 Limited	UK-England & Wales	Ordinary	100.0%	Holding	(98)
TVS Television Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
Tyneside Cable Limited Partnership (P)	UK-England & Wales	Partnership Interests	100.0%	Partnership	(98)
Virgin Media Business Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Virgin Media Communications Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Virgin Media Communications Networks Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
Virgin Media Employee Medical Trust Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
Virgin Media Finance plc	UK-England & Wales	Ordinary	100.0%	Financing	(98)
Virgin Media Finco Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Virgin Media Investment Holdings Limited	UK-England & Wales	Ordinary	100.0%	Financing	(98)
Virgin Media Investments Limited	UK-England & Wales	Ordinary	100.0%	Holding	(98)
Virgin Media Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Virgin Media Mobile Finance Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Virgin Media Payments Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Virgin Media Properties Limited	UK-England & Wales	Ordinary	100.0%	Holding	(98)
Virgin Media Secretaries Limited	UK-England & Wales	Ordinary	100.0%	Guarantor (PPF Levy)	(98)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
Virgin Media Secured Finance plc	UK-England & Wales	Ordinary	100.0%	Financing	(98)
Virgin Media Senior Investments Limited	UK-England & Wales	Ordinary	100.0%	Financing	(98)
Virgin Media SFA Finance Limited	UK-England & Wales	Ordinary	100.0%	Financing	(98)
Virgin Media Transfers (No 3) Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
Virgin Media Wholesale Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Virgin Mobile Group (UK) Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
Virgin Mobile Holdings (UK) Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
Virgin Mobile Telecoms Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Virgin Net Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
VM Sundial Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
VM Transfers (No 4) Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
VM Transfers (No 5) Limited	UK-England & Wales	Ordinary & Deferred	100.0%	Holding	(98)
VMFH Limited	UK-England & Wales	Ordinary & Deferred	100.0%	Telecoms	(98)
VMIH Sub Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
VMWH Limited	UK-England & Wales	Ordinary	100.0%	Dormant	(98)
W Television Leasing Limited	UK-England & Wales	Ordinary	100.0%	Leasing	(98)
Wakefield Cable Communications Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
Windsor Television Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
X-TANT Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Yorkshire Cable Communications Limited	UK-England & Wales	Ordinary	100.0%	Telecoms	(98)
Yorkshire Cable Finance Limited	UK-England & Wales	Ordinary	100.0%	In Liquidation	(97)
CableTel Northern Ireland Limited	UK-Northern Ireland	Ordinary	100.0%	Dormant	(101)
CableTel Scotland Limited	UK-Scotland	Ordinary	100.0%	Dormant	(102)
Capital City Cablevision Limited	UK-Scotland	Ordinary	100.0%	In Liquidation	(103)
ntl Glasgow	UK-Scotland	Ordinary	100.0%	Dormant	(102)
Perth Cable Television Limited	UK-Scotland	Ordinary	100.0%	Dormant	(102)
Telewest Communications (Cumbernauld) Limited	UK-Scotland	Ordinary	100.0%	Telecoms	(102)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
Telewest Communications (Dumbarton) Limited	UK-Scotland	Ordinary	100.0%	Telecoms	(102)
Telewest Communications (Dundee & Perth) Limited	UK-Scotland	Ordinary	100.0%	Telecoms	(102)
Telewest Communications (Falkirk) Limited	UK-Scotland	Ordinary	100.0%	Telecoms	(102)
Telewest Communications (Glenrothes) Limited	UK-Scotland	Ordinary	100.0%	Telecoms	(102)
Telewest Communications (Motherwell) Limited	UK-Scotland	Ordinary	100.0%	Telecoms	(102)
Telewest Communications (Scotland Holdings) Limited	UK-Scotland	Ordinary	100.0%	Dormant	(102)
Telewest Communications (Scotland) Limited	UK-Scotland	Ordinary	100.0%	Telecoms	(102)
Telewest Communications (Scotland) Venture (P)	UK-Scotland	Partnership Interests	100.0%	Partnership	(102)
Cable& Wireless Communications Limited	United Kingdom	Ordinary	100.0%	Holding	(100)
Cable & Wireless Carrier Limited	United Kingdom	Ordinary	100.0%	Holding	(44)
Cable & Wireless Services UK Limited	United Kingdom	Ordinary	100.0%	Holding	(44)
LGCI HoldCo III Ltd (1)	United Kingdom	Ordinary	100.0%	Holding	(100)
LGCI Holding Limited (1)	United Kingdom	Ordinary	100.0%	Holding	(100)
LGE Coral Holdco Ltd	United Kingdom	Ordinary	100.0%	Holding	(100)
Liberty Global Broadband I Limited	United Kingdom	Ordinary	100.0%	Holding	(100)
Liberty Global Broadband II Limited	United Kingdom	Ordinary	100.0%	Holding	(100)
Liberty Global CIHB Ltd (1)	United Kingdom	Ordinary	100.0%	Holding	(100)
Liberty Global Content Investments Holding Ltd.	United Kingdom	Ordinary	100.0%	Holding	(100)
Liberty Global Content Ltd.	United Kingdom	Ordinary	100.0%	Holding	(100)
Liberty Global Europe 2 Limited (1)	United Kingdom	Ordinary	100.0%	Holding	(100)
Liberty Global Europe Ltd.	United Kingdom	Ordinary	100.0%	Holding	(100)
Liberty Global Finance I (UK) Ltd.	United Kingdom	Ordinary	100.0%	Holding	(100)
Liberty Global Incorporated Limited (1)	United Kingdom	Ordinary	100.0%	Holding	(100)
Liberty Global Technology Limited (1)	United Kingdom	Ordinary	100.0%	Holding	(100)
Liberty Global Ventures Group Limited (1)	United Kingdom	Ordinary	100.0%	Holding	(100)
Lynx Europe 4 Limited	United Kingdom	Ordinary	100.0%	Holding	(100)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
The Eastern Telegraph Company Limited	United Kingdom	Ordinary	100.0%	Holding	(44)
The Western Telegraph Company Limited	United Kingdom	Ordinary	100.0%	Holding	(44)
UPC Broadband UK Limited	United Kingdom	Ordinary	100.0%	Holding	(100)
Cable & Wireless Delaware 1, Inc.	United States	Common	100.0%	Holding	(104)
Avon Cable Limited Partnership (P)	USA-Colorado	Partnership Interests	100.0%	Partnership	(105)
Cotswolds Cable Limited Partnership (P)	USA-Colorado	Partnership Interests	100.0%	Partnership	(105)
Edinburgh Cable Limited Partnership (P)	USA-Colorado	Partnership Interests	100.0%	Partnership	(105)
Estuaries Cable Limited Partnership (P)	USA-Colorado	Partnership Interests	100.0%	Partnership	(105)
LGI International Holdings, Inc.	USA-Colorado	Common	100.0%	Holding	(105)
LGI Technology Holdings Inc.	USA-Colorado	Common	100.0%	Holding	(105)
Liberty Global Management, LLC	USA-Colorado	Common	100.0%	Services	(105)
Liberty Global Services, LLC	USA-Colorado	Common	100.0%	Services	(105)
Liberty Home Shop International, Inc.	USA-Colorado	Common	100.0%	Dormant	(105)
London South Cable Partnership (P)	USA-Colorado	Partnership Interests	100.0%	Partnership	(105)
Lynx Finance 1 LLC	USA-Colorado	Common; preferred	100.0%	Holding	(105)
TCI US West Cable Communications Group (P)	USA-Colorado	Partnership Interests	100.0%	Partnership	(105)
UIM Aircraft, LLC	USA-Colorado	Partnership Interests	100.0%	Partnership	(105)
United Cable (London South) Limited Partnership (P)	USA-Colorado	Partnership Interests	100.0%	Partnership	(105)
United Chile, LLC	USA-Colorado	Common	100.0%	Holding	(105)
Virgin Media Finance Holdings Inc.	USA-Colorado	Common	100.0%	Holding	(105)
Virgin Media Group LLC	USA-Colorado	Common	100.0%	Holding	(105)
Virgin Media Inc.	USA-Colorado	Common	100.0%	Holding	(105)
Associated SMR, Inc.	USA-Delaware	Common	100.0%	Holding	(105)
Chartwell Investors, LP	USA-Delaware	Partnership Interests	100.0%	Partnership	(105)
Coral-US Co-Borrower LLC	USA-Delaware	Common	100.0%	Holding	(105)
LCPR Ventures LLC	USA-Delaware	Common	100.0%	Holding	(105)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
Leo Cable LLC	USA-Delaware	Partnership Interests; economic	60.0%	Holding	(105)
Leo Cable LP	USA-Delaware	Partnership Interests; economic	60.0%	Holding	(105)
LGI International, Inc.	USA-Delaware	Common	100.0%	Holding	(105)
LGI Ventures Management, Inc.	USA-Delaware	Common	100.0%	Holding	(105)
Liberty Global Europe LLC	USA-Delaware	Common	100.0%	Holding	(105)
Liberty Global Japan, LLC	USA-Delaware	Common	100.0%	Holding	(105)
Liberty Global, Inc. (1)	USA-Delaware	Common	100.0%	Holding	(105)
Liberty Japan MC, LLC	USA-Delaware	Common	100.0%	Holding	(105)
Liberty Japan V, Inc.	USA-Delaware	Common	100.0%	Holding	(105)
Liberty Media International Holdings, LLC	USA-Delaware	Common	100.0%	Holding	(105)
Liberty Programming Japan, LLC	USA-Delaware	Common	100.0%	Holding	(105)
Liberty Spectrum Inc.	USA-Delaware	Common	100.0%	Holding	(105)
LiLAC Communications Inc.	USA-Delaware	Common	100.0%	Holding	(105)
North CableComms Holdings LLC	USA-Delaware	Common	100.0%	Holding	(106)
North CableComms LLC	USA-Delaware	Common Interests	100.0%	Holding	(106)
North CableComms Management LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
NTL (Triangle) LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
NTL Bromley LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
NTL CableComms Group LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
NTL Chartwell Holdings 2 LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
NTL Chartwell Holdings LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
NTL North CableComms Holdings LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
NTL North CableComms Management LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
NTL Solent LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)

Name of subsidiary	Country of incorporation	Holdings	Proportion of voting rights and shares held	Nature of business	Registered address
NTL South CableComms Holdings, Inc.	USA-Delaware	Common Stock	100.0%	Holding	(106)
NTL South CableComms Management LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
NTL Surrey LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
NTL Sussex LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
NTL UK CableComms Holdings LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
NTL Wessex LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
NTL Winston Holdings LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
NTL Wirral LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
Petrel Communications Corporation	USA-Delaware	Bearer Shares	100.0%	In Liquidation	(107)
SkyOnline Maya-1, LLC	USA-Delaware	Member Interests	100.0%	Operating	(108)
South CableComms Holdings LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
South CableComms LLC	USA-Delaware	Common Interests	100.0%	Holding	(106)
South CableComms Management LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
Telenet Financing USD LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
Telewest Global Finance LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
UnitedGlobalCom LLC	USA-Delaware	Common Stock	100.0%	Holding	(105)
UPC Financing Partnership	USA-Delaware	Common Stock	100.0%	Holding	(106)
Virgin Media Bristol LLC	USA-Delaware	Common Stock	100.0%	Holding	(106)
Winston Investors LLC	USA-Delaware	Common Interests	100.0%	Holding	(106)
Columbus Networks USA (2015), Inc.	USA-Delaware; USA-Florida	Common	100.0%	Operating	(106)
Cable & Wireless Communications Inc.	USA-Florida	Common	100.0%	Operating	(109)
Columbus Networks Venezuela S.A.	Venezuela	Common	100.0%	Operating	(110)
Cable and Wireless (BVI) Limited	Virgin Islands, British	Ordinary	100.0%	Operating	(111)
Cable and Wireless (EWC) Limited	Virgin Islands, British	Ordinary	100.0%	Wholesale Solutions/ Operating	(111)

(1) Subsidiary is a direct subsidiary of Liberty Global plc.

(2) Telecoms House, The Valley, Anguilla AI 2640

(3) P.O Box W1624, Long Street, St. John's, Antigua

(4) PO Box 65, Wireless Road, St. Johns, Antigua

(5) Wolfganggasse 58 - 60, 1120 Vienna, Austria

(6) 8, Bahngasse, Wiener Neustadt, A-2700, Germany

(7) 2A East Mall Drive Columbus Building Freeport Bahamas

(8) Bayside Executive Park Building 3, West Bay Street & Blake Road, P.O. Box N-4875, Nassau, Bahamas

(9) Suite 205-207 Dowell House Roebuck & Palmetto Streets Bridgetown, Barbados

(10) Windsor Lodge, Government Hill, St Michael, Barbados

(11) 6th Floor, CGI Tower, Warrens, St Michael, Barbados

(12) Ingleside Cnr. Pine Road & 7th Avenue, Belleville, Barbados (pending change to Suite 205-207 Dowell House Roebuck & Palmetto Streets Bridgetown, Barbados)

(13) Neerveldstraat 105, 1200 Sint Lambrechts Woluwe - Brussels, Belgium

(14) Liersesteenweg 4, B-2800, Mechelen, Belgium

(15) 99, Ballaarstraat, Antwerpen, 2018, Belgium

(16) Cumberland House, 9th Floor, 1 Victoria Street, HM11, Hamilton, Bermuda

(17) c/o Deloitte Ltd, Corner House, 20 Parliament Street, Hamilton HM 12, Bermuda

(18) Kaya Korona 11, Bonaire

(19) 1300-1969 Upper Water Street, Purdy's Wharf Tower II, Halifax NS Canada B3J 2R7

(20) Suite 1100 Scotia Centre 235 Water St. St. John's NL A1C 1B6

(21) Governors Square, Building 4, 2nd Floor, 23 Lime Tree Bay Avenue, PO Box 1051, Grand Cayman, KY1-1102, Cayman Islands

(22) 190 Elgin Avenue, George Town, Grand Cayman, KY1-9005, Cayman Islands

(23) 94 Solaris Avenue, Camana Bay, P.O. Box 1348, Grand Cayman, KY1-1108, Cayman Islands

(24) Willow House, Cricket Square, PO Box 709, Grand Cayman, KY1-1107, Cayman Islands

(25) c/o Maples and Calder, PO Box 309, Ugland House, Grand Cayman KY1-1104, Cayman Islands

(26) c/o Codan Trust Company (Cayman) Limited, Cricket Quare, Huitchins Drive, PO Box 2681, Grand Cayman KY1-1111, Cayman Islands

(27) c/o Intertrust Corporate Services (Cayman) Limited, 87 Mary Street, Georgetown, Grand Cayman KY1-9004, Cayman Islands

(28) Avenida Apoquindo 4800, Las Condes, Santiago, Chile

(29) Cra 45 No. 108-27 Torre 3 Of: 901 Bogotá, Colombia

(30) Calle 108 # 4530 Oficinas 901 y 1001-Edificio Paralelo 108, Bogota, Colombia- Zip Code- 110111

(31) Calle 66 No. 67-123 Barranquilla, Colombia

(32) 6th floor, San José, Tejos Montealegre, from Tony Romas 600 meters west, General Bank building, Costa Rica

(33) San Pedro de Montes de Oca, edificio Da Vinci, Piso 3 Oficina 9

(34) Escazú, Edificio Meridiano, 6to piso Costa Rica

(35) Kaya Angel J. Leañez Kavel 25-26, Curacao

(36) Ara Hill Top Building, Unit A-6, Pletterijweg Oost 1, Curacao

(37) E-Zone Vredenberg Corner Heelsumstraat/Hugenholtzweg

(38) ZAVISOVA 502/5, 14000, PRAHA 4, District of Prague 4, Czech Republic

(39) 30 Hanover Street, Roseau, Dominica

(40) Calle Central esquina Calle A #100, Zona Industrial de Herrera, Santo Domingo, Republica Dominicana

(41) Avenida Gustavo Mejia Ricart, No. 106 Torre Piantini, Suite 802, Santo Domingo, Dominican Republic

(42) Site Center Torre 1 Ofic. 301, Called Del Establo y Calle E, Cumbaya, Quito - Ecuador

(43) Calle La Mascota 533, Colonia San Benito, San Salvador, Republica de El Salvador

(44) 2nd Floor, 62-65 Chandos Place, London, WC2N 4HG, UK

(45) 38 Rue de Berri 75008 Paris, France

(46) 52 Boulevard Sebastopol, 75003, PARIS-France

(47) Aachener Strasse 746-750, Cologne, 50933-Germany

(48) P.O. Box 119, Mt. Hartman, St. George, Grenada

(49) St. Martin’s, Lucas Street St. George’s, Grenada

(50) Avenida Reforma 9-55 Z.10 Edificio Reforma 10 Oficina 5-10

(51) c/o Cabinet Sales, 62, rue Geffrard, 9angle rue Chavannes) HT 6140 Petion-Ville, Haiti

(52) Orquidea Blanca, 14 Avenida Circunvalacion N.O. Cortes San Pedro Sula.

(53) Soroksari Ut 30-34, Haller Gardens Building, Budapest 1095, Hungary

(54) Wisma GKBI, Suite 10th Floor Jl Jend Sudirman No. 28 Jakarta 10210 Indonesia

(55) Building P2, East Point Business Park, Clontarf, Dublin 3, Republic of Ireland

(56) Level 2, Samuel Harris House, 5-11 St George's Street, Douglas, IM1 1AJ, Isle of Man

(57) 2-6 Carlton Crescent, Kingston 10, Jamaica

(58) 1 Mangrove Way, Montego Free Zone, Saint James, Jamaica

(59) 46A, Avenue J.F. Kennedy, L-1855 Luxembourg, P.O. Box 415, L-2014 Luxembourg

(60) 2 Rue Peternelchen, L-2370 Howald, Luxembourg

(61) 65, boulevard Grande-Duchesse Charlotte, L-1331- Luxembourg, Grand-Duche de Luxembourg

(62) Development House, St. Anne Street, Floriana FRN 9010, Malta

(63) Bosque de Duraznos 69, Miguel Hidalgo Distrito, 11700 Mexico

(64) Atoomweg 100, 3542 AB Utrecht, The Netherlands

(65) Boeing Avenue 53, 1119 PE Schiphol-Rijk, The Netherlands

(66) 26 Red Lion Square, 3rd Floor, London WC1R 4HQ, United Kingdom

(67) Prins Bernhardplein 200, 1097 JB, Amsterdam, The Netherlands

(68) Planes de Altamira, frente a la Casa del Café Managua, Nicaragua

(69) Calle 50 y 53 Marbella, Edificio P.H. Plaza 2000 piso 9, Apartado Postal 0823-03417, Ciudad de Panamá – Panamá

(70) East 53rd Street, Marbella Humbolt Tower, 2nd Floor, Panama, Rep. of Panama

(71) Luis Fernando Martinot Oliart Senior Partner Las Begonias 475 sexto piso San Isidro Lima 27 Peru

(72) ul. Kijowska 44, 85-703 Bydgoszcz, Poland

(73) Al. Jana Pawla II 27, 00-867 Warszawa, POLAND

(74) Luz R. Martinez Rivera 270 Munoz Rivera Ave., San Juan, Puerto Rico 00918

(75) 1 Calle Manuel Camunas, San Juan, Puerto Rico 00918

(76) Strada Nordului nr. 62 D Sector 1, 014104 Bucharest, Romania

(77) Nordului nr. 62 D Sector 1, 014104 Bucharest, Romania

(78) Francis Rachel Street, Victoria, Mahe, Seychelles

(79) Government of Seychelles, Department of Legal Affairs, Registration Division, Kingsgate House, Victoria, Mahe, Seychelles

(80) 6 Temasek Boulevard, #33-03/05 Suntec Tower Four, Singapore, 038986

(81) Ševčenkova 36, 851 01 Bratislava, Slovak Republic

(82) P.O. Box 86, Cayon Street, Basseterre, St Kitts

(83) Hewanorra House, Trou Garnier Financial Centre, Pointe Seraphine, Castries, Saint Lucia

(84) Corinth, Gros-Islet, St Lucia

(85) 10 Manoel Street, Castries, St. Lucia

(86) Halifax Street, Kingstown, St Vincent

(87) Lower Baystreet, Kingstown, St. Vincent and the Grenadines

(88) Societe Fiduciaire, Re de Rhone, 1204 Geneve, Switzerland

(89) Rue de Lausanne 53, 1110 Morges, Vaud, Switzerland

(90) Passage du Lion d'Or, Case Postale 292, 1040 Echallens

(91) Route de Lausanne 2, 1096 Cully, Vaud, Switzerland

(92) Richtiplatz 5, 8304 Wallisellen/ZH

(93) Avenue de la Gare 15, 2000 Neuchâtel, Switzerland

(94) Queen's Park Place, 17-20 Queens Park West, Port-of-Spain, Trinidad and Tobago

(95) 5th Floor, Newtown Centre, 30-36 Maraval Road, Newtown, Port of Spain

(96) P.O. Box 560, Upper Floor East Wing, The Beatrice Butterfield Building, Butterfield Square, Turks and Caicos Islands

(97) 1 More London Place, London SE1 2AF, England

(98) Media House, Bartley Wood Business Park, Hook, Hampshire, RG27 9UP, England

(99) 1 Dunstall Business Centre, Astwood Lane, Feckenham, England, B96 6QH

(100) Griffin House, 161 Hammersmith Road, London W6 8BS, England

(101) Unit 3, Blackstaff Road, Kennedy Way Industrial Estate, Belfast, BT11 9AP, Northern Ireland

(102) 1 South Gyle Crescent Lane, Edinburgh, EH12 9EG, Scotland

(103) 10 George Street, Edinburgh, EH2 2DZ, Scotland

(104) Corporation Trust Center, 1209 Orange Street, Wilmington, New Castle, Delaware, USA

(105) Triangle Building, 1550 Wewatta Street, Suite 1000, Denver, CO 80202, USA

(106) 2711 Centerville Road, Ste 400, Willmington, DE 19808

(107) Corporate Creations Network Inc., 3411 Silverside Road Tatnall Building STE 104, Wilmington, DE 19808 USA

(108) 108 West 13th Street, City of Wilmington, County of New Castle, Delaware 19801

(109) c/o Corporation Services Company, Bank of America Centre, 16th Floor, 1111 East Main Street, Richmond, VA 23219, USA

(110) Centro Lido, Torre C, Pisos 5 y 8 Ave. Francisco de Miranda Apartado 50925, Sabana Grande, Caracas 1060 Venezuela

(111) Craigmuir Chambers, Road Town, Tortola, British Virgin Islands

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF LIBERTY GLOBAL PLC

We have audited the parent company financial statements of Liberty Global plc for the year ended December 31, 2016 set out on pages III-3 to III-17. The financial reporting framework that has been applied in their preparation is applicable law and U.K. Accounting Standards (U.K. Generally Accepted Accounting Practice), including FRS 101, *Reduced Disclosure Framework*.

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members, as a body, for our audit work, for this report, or for the opinions we have formed.

Respective responsibilities of directors and auditor

As explained more fully in the Directors' Responsibilities Statement set out on page II-1, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. Our responsibility is to audit, and express an opinion on, the financial statements in accordance with applicable law and International Standards on Auditing (U.K. and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

Scope of the audit of the financial statements

A description of the scope of an audit of financial statements is provided on the Financial Reporting Council's website at www.frc.org.uk/auditscopeukprivate.

Opinion on financial statements

In our opinion the parent company financial statements:

- give a true and fair view of the state of the company's affairs as at December 31, 2016;
- have been properly prepared in accordance with U.K. Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

Opinion on other matters prescribed by the Companies Act 2006

In our opinion:

- the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006; and
- the information given in the Strategic Report and the Directors' Report for the financial year is consistent with the parent company financial statements.

Matters on which we are required to report by exception

We have nothing to report in respect of the following matters where the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent company financial statements and the part of the Directors' Remuneration Report are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

Other matter

We have reported separately on the group financial statements of Liberty Global plc for the year ended December 31, 2016.

/s/ JOHN CAIN

John Cain (Senior Statutory Auditor)
for and on behalf of KPMG LLP, Statutory Auditor
Chartered Accountants
15 Canada Square, London, E14 5GL
April 26, 2017

LIBERTY GLOBAL PLC
BALANCE SHEETS
December 31, 2016 and 2015
(Parent Company Only)

	December 31, 2016	December 31, 2015
	in millions	
Fixed assets:		
Investments — group undertakings (note 3)	$ 32,766.5	$ 26,652.3
Property and equipment, net (note 9)	9.0	4.2
Intangible assets not subject to amortization (note 9)	3.0	3.0
Total fixed assets	32,778.5	26,659.5
Current assets:		
Notes receivable — group undertakings (including $10,493.0 million and $9,727.1 million, respectively, due after more than one year) (note 4)	10,493.0	9,727.1
Accrued interest receivable — group undertakings (note 4)	447.8	446.2
Other receivables — group undertakings (note 4)	1,387.3	58.4
Other assets: amounts recoverable in less than one year	2.2	100.3
Deferred income taxes (including $2.9 million and 3.3, respectively, due after more than one year)	2.9	3.3
Total debtors and other assets	12,333.2	10,335.3
Cash and cash equivalents	58.9	24.6
Restricted cash (held by JSOP — note 6)	5.2	5.6
Total current assets (including $10,495.9 million and $9,730.4 million, respectively, due after more than one year)	12,397.3	10,365.5
Total assets	45,175.8	37,025.0
Creditors: amounts falling due within one year:		
Note payable — group undertakings (note 4)	1,851.7	1,121.7
Trade creditors	33.9	5.6
Other accrued and current liabilities:		
Group undertakings (note 4)	2,137.6	1,593.4
Third-party	17.1	13.4
Total creditors: amounts falling due within one year	4,040.3	2,734.1
Net current assets (including $10,495.9 million and $9,730.4 million, respectively, due after more than one year)	8,357.0	7,631.4
Total assets less current liabilities	41,135.5	34,290.9
Creditors: amounts falling due after one year:		
Notes payable — group undertakings (note 4)	3,912.9	1,336.9
Other non-current liabilities:		
Group undertakings (note 4)	981.4	—
Third-party	2.4	2.8
Total creditors: amounts falling due after one year	4,896.7	1,339.7
Total liabilities	8,937.0	4,073.8
Net assets	$ 36,238.8	$ 32,951.2

The accompanying notes are an integral part of these financial statements.

LIBERTY GLOBAL PLC
BALANCE SHEETS — (Continued)
December 31, 2016 and 2015
(Parent Company Only)

	December 31,	
	2016	**2015**
	in millions	
Capital and reserves (note 6):		
Called up share capital (note 5)	$ 10.6	$ 8.9
Share premium reserve (a)	1,103.5	986.2
Merger reserve (a)	10,083.5	5,594.6
Capital redemption reserve	1.5	0.9
Other reserves	131.7	131.7
Profit and loss account	24,908.3	26,229.3
Treasury shares, at cost	(0.3)	(0.4)
Shareholders' funds	$ 36,238.8	$ 32,951.2

(a) Merger reserve includes the premium on shares issued in connection with (i) the Ziggo Acquisition in 2014, which was previously reported in share premium reserve, and (ii) the CWC Acquisition in 2016. See note 4 to Liberty Global plc's consolidated financial statements for further information on the CWC and Ziggo acquisitions.

The financial statements were approved by the Board of Directors and were signed on its behalf on April 26, 2017 by:

/s/ Michael T. Fries

Michael T. Fries
President, Chief Executive Officer and Director
Company registered number: **8379990**

The accompanying notes are an integral part of these financial statements.

LIBERTY GLOBAL PLC
STATEMENTS OF EQUITY
December 31, 2016 and 2015
(Parent Company Only)

	Called up share capital	Share premium reserve (a)	Merger reserve (a)	Capital redemption reserve	Other reserves	Profit and loss account	Treasury shares, at cost	Shareholders' funds
				in millions				
Balance at January 1, 2015	$ 8.9	$ 902.2	$ 5,594.6	$ 0.4	$ 131.7	$ 27,866.6	$ (4.2)	$ 34,500.2
Profit for the financial period	—	—	—	—	—	544.0	—	544.0
Share issues, less expenses	0.5	84.0	—	—	—	—	—	84.5
Purchase and cancellation of our shares	(0.5)	—	—	0.5	—	(2,344.7)	—	(2,344.7)
Share-based compensation	—	—	—	—	—	168.2	—	168.2
Exercises of Liberty Global JSOP share-based awards	—	—	—	—	—	(4.8)	—	(4.8)
Treasury shares	—	—	—	—	—	—	3.8	3.8
Balance at December 31, 2015	8.9	986.2	5,594.6	0.9	131.7	26,229.3	(0.4)	32,951.2
Profit for the financial period	—	—	—	—	—	534.9	—	534.9
Share issues, less expenses	2.3	117.3	4,488.9	—	—	—	—	4,608.5
Purchase and cancellation of our shares	(0.6)	—	—	0.6	—	(2,089.5)	—	(2,089.5)
Share-based compensation	—	—	—	—	—	234.0	—	234.0
Exercises of Liberty Global JSOP share-based awards	—	—	—	—	—	(0.4)	—	(0.4)
Treasury shares	—	—	—	—	—	—	0.1	0.1
Balance at December 31, 2016	$ 10.6	$ 1,103.5	$ 10,083.5	$ 1.5	$ 131.7	$ 24,908.3	$ (0.3)	$ 36,238.8

(a) Merger reserve includes the premium on shares issued in connection with (i) the Ziggo Acquisition in 2014, which was previously reported in share premium reserve, and (ii) the CWC Acquisition in 2016. See note 4 to Liberty Global plc's consolidated financial statements for further information on the CWC and Ziggo acquisitions.

The accompanying notes are an integral part of these financial statements.

(1) Basis of Presentation

Liberty Global plc (**Liberty Global**) was formed on January 29, 2013 as a wholly-owned subsidiary of Liberty Global, Inc (**LGI**). Liberty Global is an international provider of video, broadband internet, fixed-line telephony and mobile services, with consolidated operations at December 31, 2016 in 30 countries.

These financial statements have been prepared in accordance with Financial Reporting Standard 101, *Reduced Disclosure Framework* (**FRS 101**).

For the transition to FRS 101 during 2015, we have applied International Financial Reporting Standard (**IFRS**) 1 and ensured that our assets and liabilities are measured in compliance with FRS 101. The transition to FRS 101 had no material affect on our financial statements.

IFRS 1 grants certain exemptions from the full requirements of IFRS as adopted by the European Union in the transition period. The following exemptions have been taken in these financial statements:

- IFRS 2, *Share Based Payments,* is being applied to equity instruments that were granted after November 7, 2002 and that had not vested by January 1, 2014.

In these financial statements, the company has applied the exemptions available under FRS 101 in respect of the following disclosures:

  - Cash Flow Statement and related notes;
  - Comparative period reconciliations for share capital, tangible fixed assets and intangible assets;
  - Disclosures in respect of transactions with wholly owned subsidiaries;
  - Disclosures in respect of capital management;
  - The effects of new but not yet effective IFRSs;
  - Disclosures in respect of the compensation of Key Management Personnel; and
  - Disclosures of transactions with a management entity that provides key management personnel services to the company.

As the consolidated financial statements of Liberty Global include the equivalent disclosures, the Company has also taken the exemptions under FRS 101 available in respect of the following disclosures:

- IFRS 2, *Share Based Payments,* in respect of group settled share-based payments.

These accounts present information about Liberty Global as an individual undertaking and not about its consolidated group. Under section 408 of the United Kingdom (**U.K.**) Companies Act 2006, we are exempt from the requirement to present our own profit and loss account.

On July 1, 2015, Liberty Global completed the approved steps of the "**LiLAC Transaction**" whereby Liberty Global (i) reclassified its 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 its share premium account and distributed as a dividend (or a "bonus issue" under U.K. law) its 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) Liberty Global's 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 LGI. 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.

Unless otherwise indicated, translations into United States (**U.S.**) dollars are calculated as of December 31, 2016.

In these notes, the terms "we," "our," "our company" and "us" refer to Liberty Global.

(2) Summary of Significant Accounting Policies

The accounting policies set forth below have, unless otherwise stated, been applied consistently to all periods presented in these financial statements.

Foreign Currency

Our presentation and functional currency is the U.S. dollar.

Estimates

The preparation of financial statements in conformity with U.K. Accounting Standards 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, loss contingencies, fair value measurements, impairment assessments and share-based payments. Actual results could differ from those estimates.

Going Concern

The accompanying financial statements are prepared under the assumption that we will continue to operate as a going concern, which contemplates the realization of assets and the liquidation of liabilities in the ordinary course of business. Our ability to continue as a going concern is dependent upon our ability to generate sufficient cash flows and earnings from our group undertakings' operations. We have evaluated and consider our business to be a going concern based on our capital resources, the historical operating profitability of our group undertakings, the long-term nature of our commitments and the prospects of our group undertakings.

Share Issues

Share issues are recorded at fair value of the net proceeds.

Investments

Investments in subsidiary undertakings are stated at cost. Where investments are acquired in exchange for a share issue we record the investment at fair value of the underlying share capital on the transaction date. For further information regarding our investments, see note 3.

Derivative Instruments

Derivative instruments are recorded at fair value.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation.

Depreciation is computed using the straight-line method over the estimated useful life of the underlying asset. Useful lives used to depreciate our property and equipment are assessed periodically and are adjusted when warranted. 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.

Impairment of Property and Equipment

We review, when circumstances warrant, the carrying amounts of our property and equipment 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 discounted 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.

Interest-bearing Borrowings

Debt is stated at the fair value of the consideration received on the issue of the capital instrument after deduction of issue costs. The finance cost of the debt is amortized over the term of the debt at a constant rate on the carrying amount.

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 fair value of outstanding awards as a charge to operations over the vesting period with a corresponding increase in equity.

We have calculated the expected life of options and share appreciation rights (**SARs**) 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.

Where we grant options over our own shares to the employees of our subsidiaries we recognize an increase in the cost of investment in our subsidiaries equivalent to the equity-settled share-based payment charge recognized in our subsidiary's financial statements with the corresponding credit being recognized directly in equity. Amounts recharged to and reimbursed by the subsidiary are recognized as a reduction in the cost of investment in subsidiary. If the cumulative amount recharged and reimbursed exceeds the increase in the cost of investment the excess is recognized as a dividend.

We generally issue new shares of Liberty Global ordinary shares when Liberty Global options or SARs are exercised and when restricted share units and performance-based restricted share units 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.

Income Taxes

The charge for taxation is based on the earnings or loss for the period and takes into account deferred taxation related to temporary differences between the treatment of certain items for taxation and accounting purposes.

Deferred tax is measured on an undiscounted basis at the tax rates that are expected to apply in the periods in which differences reverse, based on tax rates and laws enacted or substantively enacted at the balance sheet date.

Deferred tax assets are recognized only to the extent that the directors consider it more likely than not that there will be suitable taxable profits from which the future reversal of the underlying temporary differences can be deducted.

Foreign Currency Transactions

Transactions denominated in currencies other than our functional currency are recorded based on exchange rates at the time such transactions arise. Changes in exchange rates with respect to amounts recorded in our balance sheets related to these non-functional currency transactions result in transaction gains or losses that are reflected in our profit and loss accounts as unrealized (based on the applicable period end exchange rates) or realized upon settlement of the transactions.

Own Shares Held by JSOP Trust

Transactions of the Liberty Global sponsored joint stock ownership plan (**JSOP**) Jersey Trust (the **Liberty Global JSOP**) are treated as being those of our company and are therefore reflected as treasury shares in our financial statements. In particular, the Liberty Global JSOP's purchases and sales of shares of Liberty Global are debited and credited directly to equity.

(3) Investments in Group Undertakings

The details of our investment in group undertakings during 2016 and 2015 are set forth below (in millions):

Balance at January 1, 2015	$ 20,839.2
Additions, other than share-based compensation (a)	5,562.3
Additions arising from share-based compensation (b)	250.8
Balance at December 31, 2015	26,652.3
Additions, other than share-based compensation (c)	5,882.2
Additions arising from share-based compensation (b)	232.0
Balance at December 31, 2016	$ 32,766.5

____

(a) The increase in our investment during 2015 is primarily due to our company subscribing to 342,832,194 ordinary shares of Liberty Global Broadband II Limited (**LG Broadband II Limited**) for $5,218.4 million following the cash settlement of our note receivable from LG Broadband II Limited. For additional information, see note 4.

(b) Represents additions attributable to share-based compensation associated with employees of our subsidiaries, less amounts that we recharge to our subsidiaries in connection with the exercise of our SARs and options and the vesting of our restricted share awards held by employees of our subsidiaries, as adjusted to reflect any deemed dividends arising from amounts charged in excess of the allocated share-based compensation with respect to certain of our subsidiaries.

(c) The increase in our investment during 2016 is primarily due to (i) the fair value of the 31,607,008 Class A Liberty Global Shares, 77,379,774 Class C Liberty Global Shares, 3,648,513 Class A LiLAC Shares and 8,939,316 Class C LiLAC Shares issued to CWC shareholders in connection with the CWC Acquisition and (ii) our company subscribing to two ordinary shares of LGI for $1,270.4 million in order to facilitate settlements of related-party note receivables and payables. For additional information, see note 4 to Liberty Global plc's consolidated financial statements.

Subsidiaries

For a listing of our subsidiaries at December 31, 2016, see note 22 to Liberty Global plc's consolidated financial statements.

(4) Transactions with Group Undertakings

The following table provides details of our group undertaking balances:

	December 31,	
	2016	2015
	in millions	
LGI Note Receivable (a)	$ 9,557.6	$ 9,557.6
LG Incorporated Limited Note (b)	705.6	—
LG Content Investments BV Note (c)	97.8	92.7
LGCI Holdings Limited Note (d)	57.4	47.5
LG Ventures Group Limited Note (e)	57.1	13.7
LGCI Holdco III Ltd (f)	10.3	8.8
Interest receivable — long-term (g)	7.2	6.8
Total notes receivable	10,493.0	9,727.1
Other receivables (h)	1,387.3	58.4
Interest receivable (g)	447.8	446.2
Total	$ 12,328.1	$ 10,231.7
LG Broadband I Limited Note I (i)	$ 3,214.7	$ 1,317.6
LG Broadband I Limited Note II (j)	678.6	—
JSOP Note (k)	19.6	19.3
Total notes payable	3,912.9	1,336.9
Current note payable (l)	1,851.7	1,121.7
Other accrued and current liabilities (m)	2,137.6	1,593.4
Other non-current liabilities (m)	981.4	—
Total	$ 8,883.6	$ 4,052.0

____

(a) Represents a note receivable from LGI (the **LGI Note Receivable**). The LGI Note Receivable bears interest at 8.0% per annum and is due on June 3, 2021 with interest payments due and receivable annually on the anniversary date of the LGI Note Receivable. The LGI Note Receivable shall be subject to a guarantee and pledge agreement, as a condition to the continuing effectiveness of the LGI Note Receivable, providing for the pledge of (i) 100% of the shares of LGI International, Inc. and (ii) 66% of the shares of Liberty Global Holding BV, both of which are group undertakings.

LGI may redeem, in whole or in part, the principal amount of the LGI Note Receivable at the following redemption prices (expressed as a percentage of the principal amount) plus accrued and unpaid interest and any Breakage Amount (as defined in the applicable indenture) due to us, if any, on the applicable redemption date, if redeemed during the twelve-month period commencing on June 3 as set forth below:

Period	Premium price
June 3, 2013 — June 2, 2017	101.0%
June 3, 2017 and thereafter	100.0%

(b) Represents a note receivable from Liberty Global Incorporated Ltd (**LG Incorporated Limited**). Pursuant to the loan agreement the maturity date is November 30, 2026, however Liberty Global may agree to advance additional amounts to LG Incorporated Limited at any time and LG Incorporated Limited may, with agreement from Liberty Global, repay all or part of the outstanding principal at any time prior to the maturity date. The note receivable is subject to further borrowings and repayments. The interest rate on this loan, which is subject to adjustment, was 7.02% as of December 31, 2016.

(c) Represents a note receivable from Liberty Global Content Investments BV (**LG Content Investments BV**). Pursuant to the loan agreement the maturity date is September 23, 2022, however Liberty Global may agree to advance additional amounts to LG Content Investments BV at any time and LG Content Investments BV may, with agreement from Liberty Global, repay all or part of the outstanding principal at any time prior to the maturity date. The note receivable is subject to further borrowings and repayments. The interest rate on this loan, which is subject to adjustment, was 7.33% as of December 31, 2016. At December 31, 2016 and 2015, this note had a principal balance of €92.7 million ($97.8 million) and €85.3 million ($92.7 million at the December 31, 2015 rate), respectively.

(d) Represents a note receivable from LGCI Holdings Limited. Pursuant to the loan agreement the maturity date is March 9, 2024, however Liberty Global may agree to advance additional amounts to LGCI Holdings Limited at any time and LGCI Holdings Limited may, with agreement from Liberty Global, repay all or part of the outstanding principal at any time prior to the maturity date. The note receivable is subject to further borrowings and repayments. The interest rate on this loan, which is subject to adjustment, was 5.16% as of December 31, 2016. At December 31, 2016 and 2015, this note had a principal balance of €54.4 million ($57.4 million) and €43.7 million ($47.5 million at the December 31, 2015 rate), respectively.

(e) Represents a note receivable from Liberty Global Ventures Group Limited (**LG Ventures Group Limited**). Pursuant to the loan agreement the maturity date is August 3, 2024, however Liberty Global may agree to advance additional amounts to LG Ventures Group Limited at any time and LG Ventures Group Limited may, with agreement from Liberty Global, repay all or part of the outstanding principal at any time prior to the maturity date. The note receivable is subject to further borrowings and repayments. The interest rate on this loan, which is subject to adjustment, was 6.95% as of December 31, 2016.

(f) Represents a note receivable from LGCI Holdco III Ltd. Pursuant to the loan agreement the maturity date is September 11, 2024, however Liberty Global may agree to advance additional amounts to LGCI Holdco III Ltd at any time and LGCI Holdco III Ltd may, with agreement from Liberty Global, repay all or part of the outstanding principal at any time prior to the maturity date. The note receivable is subject to further borrowings and repayments. The interest rate on this loan, which is subject to adjustment, was 6.74% as of December 31, 2016. At December 31, 2016 and 2015, this note had a principal balance of £8.3 million ($10.3 million) and €6.0 million ($8.8 million at the December 31, 2015 rate), respectively.

(g) Represents interest related to our various notes receivable as discussed above.

(h) Represents certain receivables from other Liberty Global subsidiaries arising in the normal course of business.

(i) Represents a note payable to Liberty Global Broadband I Limited (**LG Broadband I Limited**). Pursuant to the loan agreement the maturity date is January 31, 2024, however LG Broadband I Limited may agree to advance additional amounts to our company at any time and our company may, with agreement from LG Broadband I Limited, repay all or part of the outstanding principal at any time prior to the maturity date. The note payable is subject to further borrowings and repayments. The interest rate on this loan, which is subject to adjustment, was 4.88% as of December 31, 2016. At December 31, 2016 and 2015, this note had a principal balance of €3,047.9 million ($3,214.7 million) and €1,212.6 million (€1,317.6 million at the December 31, 2015 rate), respectively.

(j) Represents a note payable to LG Broadband I Limited. Pursuant to the loan agreement the maturity date is November 30, 2026, however LG Broadband I Limited may agree to advance additional amounts to our company at any time and our company may, with agreement from LG Broadband I Limited, repay all or part of the outstanding principal at any time prior to the maturity date. The note payable is subject to further borrowings and repayments. The interest rate on this loan, which is subject to adjustment, was 5.36% as of December 31, 2016. At December 31, 2016 this note had a principal balance of €643.4 million ($678.6 million).

(k) Prior to the acquisition of Virgin Media Inc. (**Virgin Media**) by our company (the **Virgin Media Acquisition**), Virgin Media and its employees held interests in a Delaware Trust set up to hold a JSOP (the **Virgin Media JSOP**). On June 4, 2013, Liberty Global established the Liberty Global JSOP and issued a promissory note (the **JSOP Note**) to fund the trust (principal balance as of December 31, 2016 and 2015 was $19.6 million and $19.3 million, respectively). As of December 31, 2016 and 2015, the JSOP Note bore interest at 1.80% and 1.76% per annum, respectively. The interest rate is subject to adjustment on each of January 1 and July 1 during the remainder of the term to a certain U.S. Federal statutory rate, and interest shall compound semi-annually on January 1 and July 1 of each year. The principal balance is due and payable on June 4, 2018.

(l) Represents a note payable to Liberty Global Europe 2 Limited (**LG Europe 2**). Pursuant to the loan agreement the maturity date is July 16, 2023, however LG Europe 2 may agree to advance additional amounts to our company at any time and our company may, with agreement from LG Europe 2, repay all or part of the outstanding principal at any time prior to the maturity date. The note payable is subject to further borrowings and repayments. The interest rate on this loan, which is subject to adjustment, was 5.68% as of December 31, 2016.

(m) Represents (i) a $976.4 million and $973.9 million payable at December 31, 2016 and 2015, respectively, to Liberty Global Incorporated Limited and (ii) certain payables at December 31, 2016 and 2015 to other Liberty Global subsidiaries arising in the normal course of business.

(5) Called Up Share Capital

Our share capital is comprised of the following at December 31, 2016:

	Shares	Amount in millions
Allotted, called up and fully paid:		
Liberty Global Shares — Class A of $0.01 each	253,827,604	$ 2.5
Liberty Global Shares — Class B of $0.01 each	10,805,850	0.1
Liberty Global Shares — Class C of $0.01 each	634,391,072	6.3
LiLAC Shares — Class A of $0.01 each	50,317,930	0.5
LiLAC Shares — Class B of $0.01 each	1,888,323	—
LiLAC Shares — Class C of $0.01 each	120,889,034	1.2
Total share capital		$ 10.6

The details of our share activity during 2016 are set forth below:

	Liberty Global Shares			LiLAC Shares			
	Class A of $0.01 each	Class B of $0.01 each	Class C of $0.01 each	Class A of $0.01 each	Class B of $0.01 each	Class C of $0.01 each	Total shares
Balance at January 1, 2016	252,766,455	10,472,517	584,044,394	12,630,580	523,423	30,772,874	891,210,243
Impact of the CWC Acquisition (note 4)	31,607,008	—	77,379,774	3,648,513	—	8,939,316	121,574,611
Impact of the LiLAC Distribution (note 4)	—	—	—	34,691,245	1,348,234	81,391,486	117,430,965
Additional issuances	940,291	333,333	2,251,742	68,392	16,666	128,955	3,739,379
Other	901,572	—	2,272,251	—	—	—	3,173,823
Repurchases	(32,387,722)	—	(31,557,089)	(720,800)	—	(343,597)	(65,009,208)
Balance at December 31, 2016	253,827,604	10,805,850	634,391,072	50,317,930	1,888,323	120,889,034	1,072,119,813

(6) Reserves

Our called up share capital and reserves are comprised of the following at December 31, 2016 and 2015:

	Called up share capital	Share premium reserve (a)	Merger reserve (a)	Capital redemption reserve	Other reserves	Profit and loss account	Treasury shares, at cost	Shareholders' funds
				in millions				
Balance at January 1, 2015	$ 8.9	$ 902.2	$ 5,594.6	$ 0.4	$ 131.7	$ 27,866.6	$ (4.2)	$ 34,500.2
Profit for the financial period	—	—	—	—	—	544.0	—	544.0
Share issues, less expenses	0.5	84.0	—	—	—	—	—	84.5
Purchase and cancellation of our shares	(0.5)	—	—	0.5	—	(2,344.7)	—	(2,344.7)
Share-based compensation	—	—	—	—	—	168.2	—	168.2
Exercises of Liberty Global JSOP share-based awards (b)	—	—	—	—	—	(4.8)	—	(4.8)
Treasury shares	—	—	—	—	—	—	3.8	3.8
Balance at December 31, 2015	8.9	986.2	5,594.6	0.9	131.7	26,229.3	(0.4)	32,951.2
Profit for the financial period	—	—	—	—	—	534.9	—	534.9
Share issues, less expenses	2.3	117.3	4,488.9	—	—	—	—	4,608.5
Purchase and cancellation of our shares	(0.6)	—	—	0.6	—	(2,089.5)	—	(2,089.5)
Share-based compensation	—	—	—	—	—	234.0	—	234.0
Exercises of Liberty Global JSOP share-based awards (b)	—	—	—	—	—	(0.4)	—	(0.4)
Treasury shares	—	—	—	—	—	—	0.1	0.1
Balance at December 31, 2016	$ 10.6	$ 1,103.5	$ 10,083.5	$ 1.5	$ 131.7	$ 24,908.3	$ (0.3)	$ 36,238.8

____

(a) Merger reserve includes the premium on shares issued in connection with (i) the Ziggo Acquisition in 2014, which was previously reported in share premium reserve, and (ii) the CWC Acquisition in 2016. See note 4 to Liberty Global plc's consolidated financial statements for further information on the CWC and Ziggo acquisitions.

(b) For further information regarding the Liberty Global JSOP, see below.

Share Repurchases

During 2016 and 2015, our board of directors authorized various share repurchase programs, the most recent of which provides for the repurchase of up to $4.0 billion and $300.0 million of Liberty Global and LiLAC Class A and/or Class C shares, respectively. In accordance with English law, we may implement the program in conjunction with our brokers and other financial institutions with whom we have relationships within certain preset parameters. The timing of the repurchase of shares pursuant to our share repurchase programs, which may be suspended or discontinued at any time, is dependent on a variety of factors, including market conditions and applicable law and may continue during closed periods in accordance with applicable restrictions. As of December 31, 2016, the remaining amount authorized for repurchases of Liberty Global Shares and LiLAC Shares was $1,943.4

million and $278.6 million, respectively. Subsequent to December 31, 2016, our board of directors increased the amount authorized under the share repurchase program for our Liberty Global Shares by $1.0 billion.

The following table provides details of our share repurchases during 2016, 2015 and 2014:

	Class A ordinary shares		Class C ordinary shares		
Purchase date	**Shares purchased**	**Average price paid per share (a)**	**Shares purchased**	**Average price paid per share (a)**	**Total cost (a)**
					in millions
Shares purchased pursuant to repurchase programs during:					
2016	32,387,722	$ 32.26	31,557,089	$ 32.43	$ 2,068.0
2015 (b)	—	$ —	49,984,562	$ 46.91	$ 2,344.5

(a) Includes direct acquisition costs and the effects of derivative instruments, where applicable.

(b) Amounts relate to 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.

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 Liberty Global ordinary shares with an exercise price of zero. These contracts can result in the receipt of cash or 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 profit and loss account in our balance sheets.

JSOP Trust

Prior to the Virgin Media Acquisition, under the Virgin Media JSOP, participating executives and other key employees of Virgin Media in the U.K. purchased, at fair value, jointly held interests in shares of Virgin Media's stock. Participation in the Virgin Media JSOP was voluntary. On June 7, 2013, the assets held in trust by the Virgin Media Delaware grantor trust, which were comprised solely of Virgin Media shares, were transferred to the Liberty Global JSOP in exchange for the JSOP Note.

During 2016, certain participants exercised a portion of their interests in the Liberty Global JSOP, resulting in an aggregate distribution of (i) 3,434 Class A Liberty Global, (ii) 8,923 Class C Liberty Global and (iii) $0.1 million in cash.

During 2015, certain participants exercised a portion of their interests in the Liberty Global JSOP, resulting in an aggregate distribution of (i) 29,187 Class A Liberty Global / Old Liberty Global Shares, (ii) 73,991 Class C Liberty Global / Old Liberty Global Shares and (iii) $1.0 million in cash.

At December 31, 2016, the Liberty Global JSOP held $5.2 million of cash, 2,526 Class A Liberty Global Shares, 6,379 Class C Liberty Global Shares, 636 Class A LiLAC Shares and 1,665 Class C LiLAC Shares.

At December 31, 2015, the Liberty Global JSOP held $5.6 million of cash, 2,833 Class A Liberty Global Shares, 8,190 Class C Liberty Global Shares, 321 Class A LiLAC Shares and 869 Class C LiLAC Shares.

Vesting of certain Liberty Global JSOP awards is subject to performance targets. The Liberty Global JSOP trustee will return to us any cash or shares underlying awards that do not vest, and will return any dividends on the shares in the trust to our company until the awards are exercised. The Liberty Global JSOP trustee will vote shares in the trust in proportion to the votes of other shareholders of Liberty Global until the awards vest. Participation in the Liberty Global JSOP is closed to new participation.

(7) Debtors and Other Assets

Debtors and other assets consist of the following:

	December 31,	
	2016	2015
	in millions	
Amounts owed by group undertakings:		
Notes receivable (note 4)	$ 10,493.0	$ 9,727.1
Interest and other receivables (note 4)	1,835.1	504.6
Total amounts owed by group undertakings	12,328.1	10,231.7
Other assets	2.2	100.3
Deferred income taxes	2.9	3.3
Total debtors and other assets (a)	$ 12,333.2	$ 10,335.3

(a) At December 31, 2016 and 2015, $10,495.9 million and $9,730.4 million, respectively, is due after more than one year. For further information see note 4.

(8) Creditors

Creditors consists of the following:

	December 31,	
	2016	2015
	in millions	
Amounts falling due within one year:		
Note payable — group undertakings (note 4)	$ 1,851.7	$ 1,121.7
Other accrued and current liabilities — group undertakings (note 4)	2,137.6	1,593.4
Other accrued and current liabilities — third-party	17.1	13.4
Trade creditors	33.9	5.6
Total creditors — amounts falling due within one year	$ 4,040.3	$ 2,734.1
Amounts falling due after one year:		
Notes payable — group undertakings (note 4)	$ 3,912.9	$ 1,336.9
Other non-current liabilities — group undertakings (note 4)	981.4	—
Other non-current liabilities — third-party	2.4	2.8
Total creditors — amounts falling due after one year	$ 4,896.7	$ 1,339.7

(9) Long-lived Assets

Property and Equipment, Net

Changes in our property and equipment and the related accumulated depreciation are set forth below:

	Support equipment, buildings and land (a)
	in millions
Cost:	
January 1, 2016	$ 4.4
Additions	5.7
Other	(0.1)
December 31, 2016	$ 10.0
Accumulated depreciation:	
January 1, 2016	$ (0.2)
Depreciation	(0.8)
December 31, 2016	$ (1.0)
Property and equipment, net:	
December 31, 2016	$ 9.0

____

(a) The estimated useful lives at December 31, 2016 range from 3 to 15 years.

Other Indefinite-lived Intangible Assets

Our intangible assets are comprised of domain names. These intangible assets are considered to have indefinite lives and had an aggregate carrying value of $3.0 million at each of December 31, 2016 and 2015.

(10) Guarantees

On June 11, 2013, we issued guarantees for intra-group debt A and B of LG Europe 2, which guarantees were subsequently confirmed in November 2013 in connection with amendments of the underlying loan evidencing the loan to LG Europe 2 from Virgin Media Finco Limited. Interest on the loans is either (i) payable semi-annually at the applicable rate on April 15 and October 15 each year or (ii) upon mutual agreement between the debtor and creditor, is added to the principal outstanding.

On June 5, 2015, we issued a guarantee for intra-group debt C of the loan to LG Europe 2 from Virgin Media Finco Limited. Interest on the loan is either (i) payable semi-annually at the applicable rate on April 15 and October 15 each year or (ii) upon mutual agreement between the debtor and creditor, is added to the principal outstanding.

In aggregate, the debt outstanding at December 31, 2016 subject to these guarantees is $5,766.9 million.

Debt:	Maturity date	Interest rate	Borrowing currency		U.S. $ equivalent	
			in millions			
Intra-group debt A	April 15, 2023	8.500%	£	824.6	$	1,018.0
Intra-group debt B	April 15, 2023	8.500%	£	1,350.0		1,666.7
Intra-group debt C	July 16, 2023	5.659%	£	2,496.6		3,082.2
Total					$	5,766.9

(11) Directors' Remuneration

Information regarding directors' compensation (remuneration), interests in shares and share options for consolidated Liberty Global is included within the *Directors' Remuneration Report* contained in this report.

(12) Subsequent Events

For subsequent events that impact our subsidiaries, see note 20 to Liberty Global plc's consolidated financial statements.

[THIS PAGE INTENTIONALLY LEFT BLANK]

[THIS PAGE INTENTIONALLY LEFT BLANK]

[THIS PAGE INTENTIONALLY LEFT BLANK]