

LIBERTY GLOBAL PLC INVESTOR CALL | FULL YEAR 2018

February 27, 2019

"SAFE HARBOR"

Forward-Looking Statements + Disclaimer

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements with respect to our strategies, future growth prospects and opportunities; expectations with respect to our OCF growth, our Adjusted FCF, our OFCF growth, and our reduced capital intensity; expectations with respect to our operating structure reorganization plan; the anticipated closings and impacts of each of the Vodafone. DTH and Switzerland transactions; the estimated cash proceeds from pending disposals to Vodafone, Sunrise and M7, expectations regarding our share buyback program; the strength of our balance sheet and tenor of our third-party debt; and other information and statements that are not historical fact. These forwardlooking statements involve certain risks and uncertainties that could cause actual results to differ materially from those expressed or implied by these statements. These risks and uncertainties include events that are outside of our control, such as the continued use by subscribers and potential subscribers of our and our affiliates' services and their willingness to upgrade to our more advanced offerings; our and our affiliates' ability to meet challenges from competition, to manage rapid technological change or to maintain or increase rates to subscribers or to pass through increased costs to subscribers; the effects of changes in laws or regulation; general economic factors; our and our affiliates' ability to obtain regulatory approval and satisfy regulatory conditions associated with acquisitions and dispositions; our and affiliates' ability to successfully acquire and integrate new businesses and realize anticipated efficiencies from acquired businesses; the availability of attractive programming for our and our affiliates' video services and the costs associated with such programming; our and our affiliates' ability to achieve forecasted financial and operating targets; the outcome of any pending or threatened litigation; the ability of our operating companies and affiliates to access cash of their respective subsidiaries; the impact of our operating companies' and affiliates' future financial performance, or market conditions generally, on the availability, terms and deployment of capital: fluctuations in currency exchange and interest rates; the ability of suppliers, vendors and contractors to timely deliver quality products, equipment, software, services and access; our and our affiliates' ability to adequately forecast and plan future network requirements including the costs and benefits associated with network expansions; and other factors detailed from time to time in our filings with the Securities and Exchange Commission, including our most recently filed Form 10-K. Further, estimated cash proceeds from pending dispositions are inherently uncertain and represent management's expectations and beliefs, and such proceeds represented on a gross per share (non-diluted) basis are provided for illustrative purposes only and do not take into account the ultimate use of the proceeds or any other changes in our capital structure or tax effects, directly or indirectly related to the pending dispositions. These forward-looking statements speak only as of the date of this release. We expressly disclaim any obligation or undertaking to disseminate any updates or revisions to any forward-looking statement contained herein to reflect any change in our expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based

Accounting Changes

Effective January 1, 2018, we adopted Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers* ("ASU 2014-09"), by recording the cumulative effect to our accumulated deficit. Unless otherwise indicated, all prior-year amounts are presented herein on a pro forma basis that gives effect to the adoption of ASU 2014-09 as if such adoption had occurred on January 1,

2017. In addition, on January 1, 2018, we adopted ASU No. 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost* ("ASU 2017-07") on a retrospective basis. Accordingly, unless otherwise indicated, the operating income and OCF amounts for all prior-year periods presented herein have been restated to reflect the impact of ASU 2017-07. ASU 2014-09 and ASU 2017-07 are collectively referred to herein as "New GAAP."

Presentation of Continuing & Discontinuing Operations:

On December 29, 2017, the former LiLAC Group was split-off into a separate public company. On May 9, 2018, we agreed to sell our operations in Germany, Hungary, Romania and the Czech Republic. On December 21, 2018, we agreed to sell the operations of UPC DTH, which provides direct-to-home satellite services in Hungary, the Czech Republic, Romania and Slovakia. On July 31, 2018, we sold our operations in Austria. Our operations in Germany, Hungary, Romania and the Czech Republic, along with our DTH operations and our former operations in Austria are collectively referred to herein as the "Discontinued European Operations." As a result of the foregoing, the former LiLAC Group and the Discontinued European Operations have all been accounted for as discontinued operations in our December 31, 2018 Form 10-K. Unless otherwise indicated, the information in this presentation relates only to our continuing operations. For additional information regarding our discontinued operations, see note 6 to our consolidated financial statements included in our December 31, 2018 Form 10-K.

The term "Full Company" includes our continuing operations and our Discontinued European Operations, which is the basis (i) on which analyst consensus estimates for our key performance indicators are currently derived and on which we originally provided our 2018 guidance for OCF, Adjusted FCF and Property and Equipment Additions and (ii) that we use to calculate our respective leverage ratios for debt covenant compliance purposes. We present OCF, Adjusted FCF and Property and Equipment Additions on a Full Company basis in order to allow readers to track our performance against analyst consensus estimates and our original 2018 guidance as applicable.

Additional Information Relating to Defined Terms:

Please refer to the Appendix at the end of this presentation, as well as our press release dated February 27, 2019 and our SEC filings, for the definitions of the following terms which may be used herein, including: Rebased Growth, Operating Cash Flow ("OCF"), Adjusted Free Cash Flow ("FCF"), Operating Free Cash Flow ("OFCF"), Revenue Generating Units ("RGUs"), Average Revenue per Unit ("ARPU"), as well as non-GAAP reconciliations, where applicable. Unless otherwise indicated, all Rebased Growth rates are calculated on a New GAAP basis.



EXECUTIVE SUMMARY



FINANCIAL RESULTS

APPENDIX

2018 HIGHLIGHTS

Rebalanced portfolio resulting in \$16 billion of cash

- UPC Switzerland sale announced at 10x 2019 OCF
- Vodafone deal remains on-track at 11.5x 2017 OCF
- Completed UPC Austria sale at 11x 2017 OCF

Solid operating results in remaining core markets ⁽¹⁾

- Virgin revenue and OCF growth of ~4% driven by Lightning
- Telenet MVNO synergies support 8% OCF growth in Belgium
- Stabilized OCF growth at Dutch JV, sets the stage for improved 2019

Declining capital intensity drives free cash flow

- 2018 FCF target of \$1.6 billion achieved at guidance FX⁽²⁾
- Estimating approximately 20% reduction in 2019 P&E spend

CONTINUING	FY 2018 sale agreement								
	Net Adds								
Revenu	2.2%								
00	3.5%								
DISCONTINUE	ED OPERATIONS	FY 2018							
	Net Adds	366k							
Reven	ue Growth ⁽¹⁾	5.4%							
00	CF Growth ⁽¹⁾	6.1 %							
FULL COMPAN	٩Y	FY 2018							
00	OCF Growth ⁽¹⁾								
Adjusted	As reported	\$1.4bn							
FCF	Guidance FX ⁽²⁾	\$1.6bn							

⁽²⁾ February 2018 Guidance FX rates (EUR/USD 1.23; GBP/USD 1.38)

SWISS TRANSACTION OVERVIEW



	SUMMARY	Sunrise to acquire Liberty Global's operations in Switzerland
	RATIONALE	Deal creates leading national FMC challenger
	PRICE	CHF 6.3 billion ⁽¹⁾ (\$6.3 billion ⁽²⁾) total enterprise value (TEV)
	VALUATION	Represents 10x TEV/ 2019 OCF multiple ⁽³⁾
_	ESTIMATED NET PROCEEDS	 CHF 2.6 billion⁽¹⁾ (\$2.6 billion⁽²⁾) estimated net cash proceeds subject to normal working capital adjustments Liberty Global to retain all cash generated through closing Use of net proceeds will be determined in due course and will provide significant additional flexibility to optimize growth & shareholder returns
_	TIMETABLE	Transaction is expected to close by the end of 2019 Subject to Swiss regulatory approval & approval by Sunrise's shareholders in relation to an associated capital increase.

(1) Based on December 31, 2018 balances.

(2) Convenience translation based on USD/CHF spot rate of 1.00.

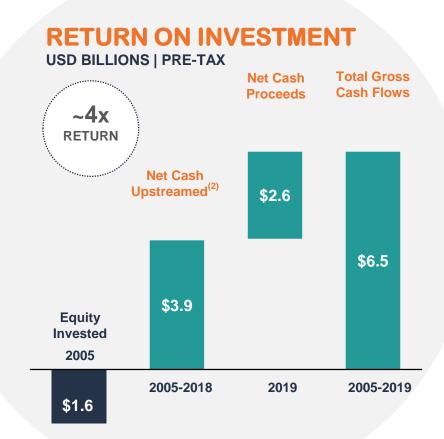
(3) For the purpose of the sale price multiple calculation, the estimated 2019 Segment OCF of UPC Switzerland has been reduced by CHF 32 million, which represents the allocable estimated net amount of transitional services (excluding amounts related to costs expected to be capitalized by Liberty Global) to be provided by Liberty Global to Sunrise during the first year following completion of the transaction.

ANOTHER EXAMPLE OF VALUE CREATION

Strong operating growth and financial returns over 13 years

UPC SWITZERLAND | OPERATING RESULTS

2005 ⁽¹⁾	2018	% Growth
2.0	2.3	13%
44.6	70.3	58%
0.8	1.3	54%
0.3	0.7	144%
36 %	57%	
	2.0 44.6 0.8 0.3	2.0 2.3 44.6 70.3 0.8 1.3 0.3 0.7

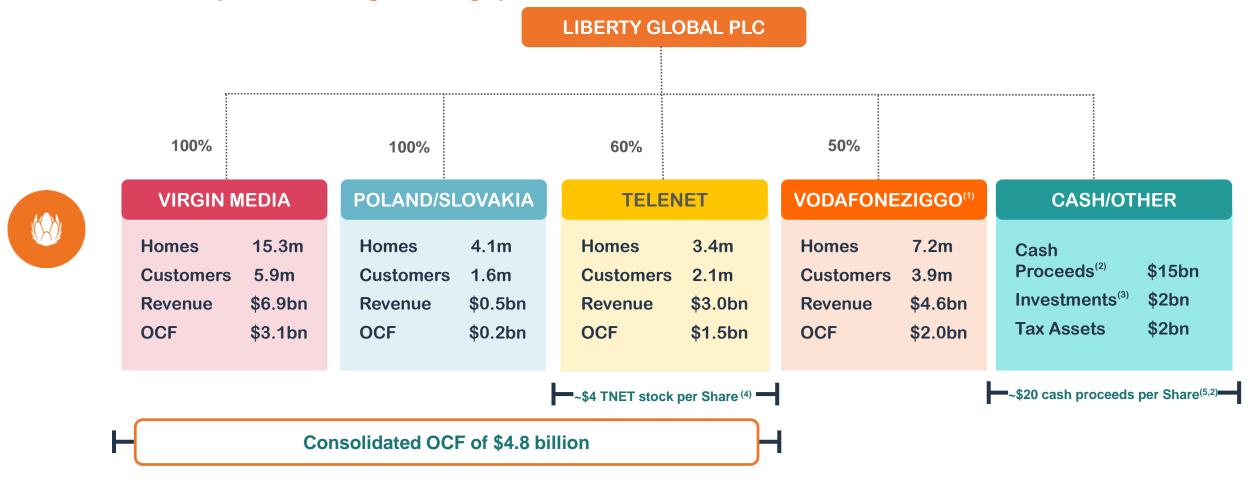


(1) Amount presented for revenue and OCF for 2005 are annualized based on the October 24, 2005 acquisition date of UPC Switzerland.

(2) The actual net cash upstreamed has been reduced for the estimated interest costs that UPC Holding has paid on behalf of UPC Switzerland between 2005 and 2018

LIBERTY POST DISPOSALS

\$15 billion of cash proceeds, strong remaining operations and \$4 billion of investments and tax assets



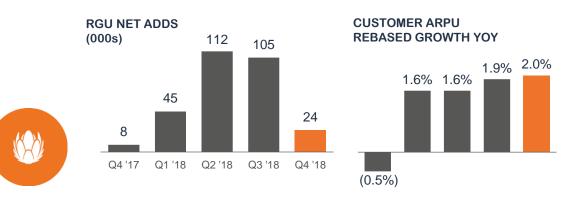
- 1) VodafoneZiggo JV not consolidated in Liberty Global's financial results or metrics.
- (2) Reflects net estimated cash proceeds from pending disposals to Vodafone (\$12.1bn), Sunrise (\$2.6bn) and M7 (\$0.2bn) (at December 31, 2018 fx rates). Does not include net cash proceeds from the UPC Austria disposal as those proceeds have already been reflected in our December 31, 2018 cash balances.
- 3) Represents our fair value and equity method investments (excluding the VodafoneZiggo JV) at December 31, 2018, adjusted for the value of our share collars on Lionsgate and ITV plc.

(4) Represents the gross amount per share for our investment in Telenet (on a non-diluted basis) calculated as the fair value of our investment in Telenet as of February 20, 2019 (Telenet's publicly reported share price of EUR 39.70, FX spot rate of 1.14 EUR/USD, and our 59.7% interest) divided by the number of Liberty Global's outstanding shares as of February 13, 2019 (742 million shares). The calculated amount does not take into account other factors such as a control premium or liquidity discount or any other adjustments or allocations could impact the per share amount.

5) Represents the gross amount per share (on a non-diluted basis) of our expected net cash proceeds, calculated as the \$15 billion cash proceeds divided by Liberty Global's outstanding shares as of February 13, 2019 (742 million shares). The calculation excludes the repayment of our UPCH term loans and other effects of changes we may ultimately make with respect to our capital structure and excludes any directly related tax effects. The calculation also excludes the investments and tax assets as disclosed above.

VIRGIN MEDIA

Accelerating cable ARPU growth and reinvigorating consumer propositions while further reducing capital intensity



BALANCING PRICE AND VOLUME

- Successfully retaining a higher proportion of the 4.5% average U.K. price rise during Q4
- Q4 RGU net adds 3x higher YoY due to growth in Lightning areas and a 10 bps reduction in churn
- CPE upgrades & base management improving NPS
- Capital intensity declined by 450 bps in Q4 driving growth in operating free cash flow

BASE MANAGEMENT & PRODUCTS DRIVE FUTURE GROWTH

- Connectivity: launch of 500 Mbps product
- Entertainment: leverage V6 investment with Horizon4 UI
- **Convergence:** drive FMC penetration beyond current 20%
- Strengthening customer relationship: continue to improve
 NPS with product enhancements
- **Digitization:** successfully growing online sales channel with increased use of automation

INORGANIC HEADWINDS IMPACTING 2019 OCF GROWTH

- Network tax increase (£32m)
- Negative regulatory impacts (mainly mobile) (£17m)
- Estimated increased programming costs (£60m £80m)⁽¹⁾
- Possible Brexit impacts

Q4'17 Q1'18 Q2'18 Q3'18 Q4'18

BENELUX OPERATIONS^(1,2)

Highly cash-generative businesses, but navigating competitive & regulatory headwinds

	BELGIUM	DUTCH J	V (50%)
SYNERGIE 2018 OCF (2018 GUIDANCE ACHIEVED	O Z
(154k) FIXED NET ADDS (1.1%) REVENUE +7.9% OCF €420m ADJUISTED	 H2 disconnects impacted by SFR migrations Competitive mobile market Appealing open access for broadband-only, cost model being developed concurrently Shareholder remuneration policy formalized Significant OFCF growth and FCF expected in 2019 as OCF headwinds tempered by declining capex: 2019 OCF impacted by loss of Medialaan MVNO, lapping BASE synergies & continued regulatory headwinds 16%-18% YoY OFCF growth⁽³⁾ 	 ADDS both Q3 & Q4'18 (2.0%) REVENUE Guiding for rebased Reconfirming €210 	obile net additions of 51,000 in spite mobile headwinds d OCF growth in 2019 m synergy target ⁽⁴⁾ cess decision, reference offer
ADJUSTED FCF ⁽³⁾	 16%-18% YoY OFCF growth⁽⁶⁾ €380m to €400m of Adjusted Free Cash Flow⁽³⁾ 	– 2019: €400m to	€600m

(1) We own a 50% noncontrolling interest in the VodafoneZiggo JV in the Netherlands and all results are as disclosed and as reported by the JV. Results are not consolidated by Liberty Global.

- (2) Revenue and OCF growth rates presented on a rebased basis as applicable.
- (3) Under IFRS reporting.

50% of 2018 & 2019 cash returns are attributable to Liberty Global. Includes dividends and principal and interest payments on shareholder loans. (5)

⁽⁴⁾ The €210 million of cost and capex run-rate savings are stated before integration costs and include €180 million of operating cost savings to be achieved by 2021.

KEY PRIORITIES 2019

- Complete pending M&A transactions
- Reset operating model and cost structure
- Drive operating free cash flow with ~20% reduction in P&E
- Develop value creation plans for capital allocation



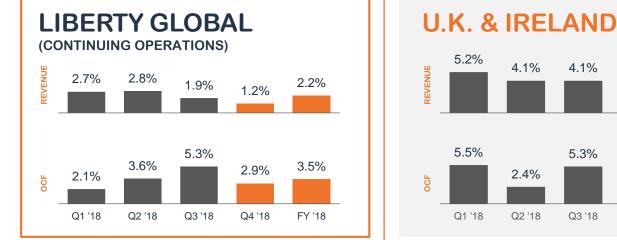
EXECUTIVE SUMMARY



APPENDIX

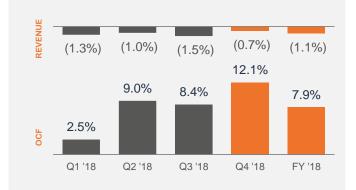
REVENUE & OCF GROWTH: CONTINUING OPERATIONS⁽¹⁾

Belgian synergies partly offset by weakness in Switzerland

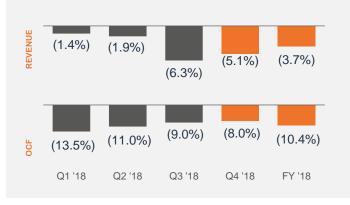


4.1% 4.1% 3.9% 2.4% 5.3% 3.5% 2.4% 1.2% Q2 '18 Q4 '18 FY '18 Q3 '18

BELGIUM



SWITZERLAND



CEE (Poland & Slovakia)



CENTRAL & OTHER



P&E ADDITIONS

Declining Capital Intensity Year over Year

		\$m	% R e	venue
		2018	2017	2018
	Total P&E Additions	\$3,706m	32.9%	31.0%
	U.K. & IRELAND	\$1,989m	33.8%	28.9%
BY	BELGIUM	\$791m	23.8%	26.4%
SEGMENT	SWITZERLAND	\$250m	17.7%	18.9%
(% local revenue)	CEE	\$153m	33.7%	31.2%
	CENTRAL	\$524m	n.m.	n.m.
	CPE	\$930m	7.6%	7.8%
BY DRIVER	NEW BUILD & UPGRADE ⁽¹⁾	\$698m	7.7%	5.8%
(% total revenue)	CAPACITY	\$434m	4.6%	3.6%
	PRODUCT & ENABLERS	\$721m	6.5%	6.0%

Highlights

- Declining capital intensity as significant project spend rolls off in U.K. & Belgium
- Proactive rollout of V6 boxes at Virgin completed in 2018
- Belgian fixed and mobile
 network upgrades complete
- Targeting ~20% reduction in capital intensity in 2019

CASH, LEVERAGE AND LIQUIDITY

Ample liquidity; higher end of 4-5x leverage framework



Original guidance stated at February 13, 2018 FX rates: EUR/USD 1.23; GBP/USD 1.38 (1)

(2) Pro forma Adjusted FCF incorporates our preliminary estimate of (a) assumed interest and related derivative payments that would not have been made by UPC Holding if the sale of the Discontinued European Operations had been completed on January 1, 2018 and (b) the net cash flows that we would have received from transition services agreements if the sale of the Discontinued European Operations had occurred on January 1, 2018. For additional details, see the information and reconciliation included within the glossary. (3) Liquidity refers to our consolidated cash and cash equivalents plus the maximum undrawn commitments under our subsidiaries' borrowing facilities without regard to covenant compliance calculations.

Consistent with how we calculate our leverage ratios under our debt agreements, these ratios are presented on a basis that includes the debt and OCF of both our Continuing and Discontinued Operations. (4)

As of December 31, 2018, none of the \$500m increase to our share repurchase program that was funded by UPC Austria sale proceeds had been utilized. Please note that this \$500m can be used at any point until July 2019. (5)

UNDERSTANDING LIGHTNING

Healthy OFCF margin before continued Lightning investments

	As of and for year ended bec 51, 2018									
VIRGIN MEDIA KPI's & FINANCIALS	LIGHTNING	REST OF BUSINESS ⁽¹⁾	TOTAL							
HOMES PASSED	1.6m	13.8m	15.3m							
CUSTOMERS	339k	5.6m	5.9m							
% Penetration ⁽²⁾	22%	41%	39%							
REVENUE ⁽³⁾	£161m	£4,989m	£5,150m							
% Growth	89%	2%	4%							
OCF ⁽³⁾	£90m	£2,203m	£2,293m							
Rebased OCF growth %	210%	1%	4%							
OCF margin (as % of Revenue)	56%	44%	45%							
CONSTRUCTION CAPEX ⁽⁴⁾	£328m	-	£328m							
Cumulative cost per premises (5)	£690	-	-							
OTHER CAPEX ⁽⁶⁾	£75m	£1,086m	£1,161m							
TOTAL CAPEX	£403m	£1,086m	£1,489m							
Cumulative Capex (since 2015)	£1,376m	-	-							
OFCF	(£313m)	£1,117m	£804m							
% Revenue	n.m.	22%	16%							

As of and for year ended Dec 31, 2018

(1) Rest of business includes B2B and mobile, among other businesses

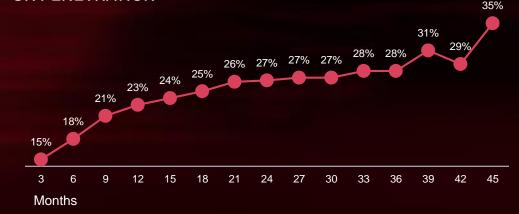
- (2) Total Customers / Total Homes Passed. Lightning UK 36 month penetrations shown in chart opposite.
- (3) Represents incremental Revenue & OCF. Please see appendix for further information.
- (4) Includes construction costs for homes that are both completed and work in progress and excludes other capex.
- (5) Represents cumulative cost per premises for completed homes since inception of Project Lightning.
- (6) Lightning Other Capex includes CPE, installation, and associated network capacity upgrade costs.

Wirgin media

HIGHLIGHTS

- Consistent build pace of 400k-500k homes per annum
- MDUs represent a significant opportunity
- Early cohorts achieving long term penetrations >30%
- Lightning ARPU in line with rest of business, once introductory discounts have lapsed
- Lightning delivering incremental OCF margin in line with plan
 - Ex-Lightning Virgin Media generated 22% OFCF margin in 2018





CHANGES TO THE OPERATING MODEL

Announced reorganization plan in January 2019

RATIONALE

- Centralized model adopted during consolidation phase
- Revisiting approach in light of recent transformative M&A
- Targeting increased efficiency by:
 - Reducing layers
 - Rationalizing functions
 - More responsibility at country level

CENTRAL COSTS PRIMARILY IN TWO AREAS

Opex/Capex split based on 2018 Actuals

) TECHNOLOGY & INNOVATION

(including Continuing Ops and TSA arrangements)

Service delivery group, undertaking certain activities on behalf of OpCos e.g.

- PRODUCT DEVELOPMENT
- TECHNOLOGY STRATEGY
- SHARED PLATFORMS

CORPORATE COSTS

Typical Corporate functions such as Management, Central Finance, Legal, Human Resources





(2) In connection with the sale of UPC Austria we entered into a multi-year Transitional Service Agreement. Similarly, following completion of the sale of our German & Eastern European assets to Vodafone and the sale of UPC Switzerland to Sunrise we will enter into multi-year Transitional Service Agreements. We also have agreements in place with the Dutch JV and Liberty Latin America for the provision of Technology & Innovation services on an ongoing basis.

UNDERSTANDING PRO FORMA FCF (CONTINUING OPERATIONS)

Presented as if disposals of the as reported Discontinued European Operations had occurred on Jan 1st, 2018⁽¹⁾

(amounts in millions)

	<u>2018</u>	
OCF (Pro forma for TSA, +\$189m)	\$5,341	
P&E ADDITIONS	(3,706)	
OFCF (Pro forma)	1,635	 Includes \$420m negative OFCF contribution from Lightning (page 14)
INTEREST/DERIVATIVES (Pro forma for UPC Discops, +\$92m)	(1,063)	 Aiming to hold broadly flat in 2019 excluding Switzerland
CASH TAX	(309)	 Mainly Telenet & US (mandatory repatriation tax)
VODAFONE ZIGGO JV (Dividend & Interest)	294	 Excludes VodafoneZiggo JV shareholder principal loan repayment (€100m)
	557	
Working Capital (242)		Headwind from split contract, annual to monthly billing and cost reductions
Operational Finance 128		Currently financing 40-50% addressable spend, further vendors interested
Restructuring & Other (54)		 2019 will be impacted by change in operating model
	(168)	• Targeting flat in aggregate for these three working capital categories in 2019
PRO FORMA ADJUSTED FCF	\$389	

2019 OUTLOOK⁽¹⁾

Continuing Operations 2019⁽²⁾

Guidance Comments

Rebased OCF	Flat to down	Inorganic headwinds in the UK and tough comparisons in Belgium
P&E Additions ⁽³⁾	~\$2.7 billion	Targeting ~20% reduction in P&E spend vs. 2018
Adjusted FCF ^(3, 4)	~\$550-\$600 million Pro Forma basis	Excludes FCF from Discontinued Operations prior to closing Expected VodafoneZiggo JV shareholder loan repayment is not included in Adjusted FCF Includes negative OFCF contribution from Lightning

Shareholder Remuneration

Buybacks	\$500 million	Through H1 2019
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- (1) Reconciliations of our 2019 guidance for P&E Additions and Adjusted FCF to a U.S. GAAP measure are not provided as not all elements of the reconciliations are projected as part of our forecasting process, as certain items may vary significantly from one period to another.
- (2) Our continuing operations guidance excludes UPC Switzerland
- (3) Based on EUR/USD 1.13; GBP/USD 1.30
- (4) Guidance of \$550-\$600 million includes positive adjustments for TSA Revenue and discontinued UPC interest in relation to asset disposals to Vodafone and Sunrise. Equal and opposite adjustments reflected in Pro Forma Adjusted FCF from Discontinued Operations.

EXECUTIVE SUMMARY



FINANCIAL RESULTS

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REBASE INFORMATION

For purposes of calculating rebased growth rates on a comparable basis for all businesses that we owned during 2018, we have adjusted our historical revenue and OCF for the three months and year ended December 31, 2017 to (i) include the pre-acquisition revenue and OCF of entities acquired during 2018 and 2017 in our rebased amounts for the three months and year ended December 31, 2017 to the same extent that the revenue and OCF of these entities are included in our results for the three months and year ended December 31, 2018, (ii) exclude the revenue and OCF of UPC Austria to the same extent that the revenue and OCF of UPC Austria is excluded from our results for the three months and year ended December 31, 2018. and to exclude the revenue and OCF of entities disposed of during 2017, (iii) include revenue for the temporary elements of transition and other services provided to the VodafoneZiggo JV. Deutsche Telekom (the buyer of UPC Austria) and Liberty Latin America, to reflect amounts related to these services equal to those included in our results for the three months and year ended December 31, 2018, (iv) reflect the January 1, 2018 adoption of the new revenue recognition standard (ASU 2014-09, Revenue from Contracts with Customers) as if such adoption had occurred on January 1, 2017 and (v) reflect the translation of our rebased amounts for the three months and year ended December 31, 2017 at the applicable average foreign currency exchange rates that were used to translate our results for the three months and year ended December. 2018. We have reflected the revenue and OCF of these acquired entities in our 2017 rebased amounts based on what we believe to be the most reliable information that is currently available to us (generally pre-acquisition financial statements), as adjusted for the estimated effects of (a) any significant differences between U.S. GAAP and local generally accepted accounting principles, (b) any significant effects of acquisition accounting adjustments, (c) any significant differences between our accounting policies and those of the acquired entities and (d) other items we deem appropriate. We do not adjust preacquisition periods to eliminate nonrecurring items or to give retroactive effect to any changes in estimates that might be implemented during post-acquisition periods. As we did not own or operate the acquired businesses during the pre-acquisition periods, no assurance can be given that we have identified all adjustments necessary to present the revenue and OCF of these entities on a basis that is comparable to the corresponding post-acquisition amounts that are included in our historical results or that the pre-acquisition financial statements we have relied upon do not contain undetected errors. The adjustments reflected in our rebased amounts have not been prepared with a view towards complying with Article 11 of Regulation S-X. In addition, the rebased growth percentages are not necessarily indicative of the revenue and OCF that would have occurred if these transactions had occurred on the dates assumed for purposes of calculating our rebased amounts or the revenue and OCF that will occur in the future. The rebased growth percentages have been presented as a basis for assessing growth rates on a comparable basis, and are not presented as a measure of our pro forma financial performance.

The following table provides adjustments made to the 2017 amounts to derive our rebased growth rates:

		Reve	enue		OCF					
	Three months ended December 31,		Year ended December 31,		Three months ended December 31,		Year ended December 31			
		2017		2017		2017	2017			
האמר הפגמו המנכח				in mil	lions					
Continuing operations:										
Acquisitions	\$	18.6	\$	75.8	\$	2.9	\$	25.2		
Revenue Recognition (ASU 2014-09)		(3.9)		(21.5)		(7.6)		(31.9)		
Dispositions ^(I)		(0.3)		(21.1)		8.0		(1.2)		
Foreign Currency		(89.2)		396.5		(35.0)		159.5		
Total increase (decrease)	\$	(74.8)	\$	429.7	\$	(31.7)	\$	151.6		
Discontinued European Operations:										
Revenue Recognition (ASU 2014-09)	\$	(2.3)	\$	(17.3)	\$	(2.2)	\$	(12.0)		
Dispositions		(101.0)		(169.0)		(56.8)		(94.4)		
Foreign Currency		(35.2)		163.2		(22.9)		91.2		
Total decrease	\$	(138.5)	\$	(23.1)	\$	(81.9)	\$	(15.2)		
Full Company:										
Acquisitions	\$	18.6	\$	75.8	\$	2.9	\$	25.2		
Revenue Recognition (ASU 2014-09)		(6.2)		(38.8)		(9.8)		(43.9)		
Dispositions ^(I)		(101.3)		(190.1)		(48.8)		(95.6)		
Foreign Currency		(124.4)		559.7		(57.9)		250.7		
Total increase (decrease)	\$	(213.3)	\$	406.6	\$	(113.6)	\$	136.4		

(i) Includes rebase adjustments related to agreements to provide transitional and other services to the VodafoneZiggo JV, Liberty Latin America and UPC Austria. These adjustments result in an equal amount of fees in both the 2018 and 2017 periods for those services that are deemed to be temporary in nature. The net amount of these adjustments resulted in increases in revenue and OCF of \$8.4 million and \$9.1 million, respectively, for the three months ended December 31, 2017 and \$8.0 million and \$6.9 million, respectively, for the full year ended December 31, 2017.

10-Q or 10-K: As used herein, the terms 10-Q and 10-K refer to our most recent guarterly or annual report as filed with the Securities and Exchange Commission on Form 10-Q or Form 10-K, as applicable.

Adjusted Free Cash Flow (FCF): net cash provided by our operating activities, plus (i) cash payments for third-party costs directly associated with successful and unsuccessful acquisitions and dispositions and (ii) expenses financed by an intermediary, less (a) capital expenditures, as reported in our consolidated statements of cash flows, (b) principal payments on amounts financed by vendors and intermediaries and (c) principal payments on capital leases (exclusive of the portions of the network lease in Belgium and the duct leases in Germany that we assumed in connection with certain acquisitions), with each item excluding any cash provided or used by our discontinued operations. We believe that our presentation of Adjusted Free Cash Flow provides useful information to our investors because this measure can be used to gauge our ability to service debt and fund new investment opportunities. Adjusted Free Cash Flow should not be understood to represent our ability to fund discretionary amounts, as we have various mandatory and contractual obligations, including debt repayments, which are not deducted to arrive at this amount. Investors should view Adjusted Free Cash Flow as a supplement to, and not a substitute for, U.S. GAAP measures of liquidity included in our consolidated statements of cash flows.

The following table provides a reconciliation of our net cash provided by operating activities from continuing operations to Adjusted Free Cash Flow for the indicated periods. In addition, in order to provide information regarding the changes to our Adjusted Free Cash Flow that we expect will occur following the sale of the (i) Discontinued European Operations, we also present Adjusted Free Cash Flow on a pro forma basis for three months and year ended December 31, 2018 as if the sale of the Discontinued European Operations had been (ii) completed on January 1 2018

				Thre	ee months end	led D	ecember 31,			
	2018		2017 ⁽¹⁾		2018		2017 ⁽¹⁾	2018		2017 ⁽¹⁾
	Conti opera				Discontinued European Operations			Full Co	mpan	y
					in mi	lions				
Net cash provided by operating activities of our continuing operations	\$ 1,277.5	\$	1,003.1	\$	485.2	\$	489.8	\$ 1,762.7	\$	1,492.9
Cash payments for direct acquisition and disposition costs	9.0		1.8		0.1		_	9.1		1.8
Expenses financed by an intermediary ^(II)	459.8		391.3		136.5		48.5	596.3		439.8
Capital expenditures, net	(314.5)		(403.7)		(128.2)		(172.0)	(442.7)		(575.7
Principal payments on amounts financed by vendors and intermediaries	(340.0)		(387.6)		(155.7)		(108.9)	(495.7)		(496.5
Principal payments on certain capital leases	(13.9)		(17.2)		(2.9)		(2.7)	(16.8)		(19.9
Adjusted FCF	1,077.9	\$	587.7	\$	335.0	\$	254.7	\$ 1,412.9	\$	842.4
Pro forma adjustments for sale of the Discontinued European Operations related to:										
Interest and derivative payments ^(II)	4.1									
Transition services agreements ^(N)	39.8									
Pro forma Adjusted FCF ^(V)	\$ 1,121.8									

	Year ended December 31,											
	2018		2017 ⁰⁾		2018		2017 ^(I)		2018		2017 ^(I)	
	Continuing	Continuing operations					Discontinued European Operations			Full company		
					in mi	llions						
Net cash provided by operating activities of our continuing operations	\$ 3,985.0	\$	3,442.7	\$	1,978.1	\$	1,691.5	\$	5,963.1	\$	5,134.2	
Cash payments for direct acquisition and disposition costs	23.0		8.7		0.1		_		23.1		8.7	
Expenses financed by an intermediary ^(II)	1,883.7		1,343.9		392.1		163.0		2,275.8		1,506.9	
Capital expenditures, net	(1,453.0)		(1,250.0)		(517.2)		(703.1)		(1,970.2)		(1,953.1)	
Principal payments on amounts financed by vendors and intermediaries	(4,258.0)		(2,721.5)		(551.6)		(337.8)		(4,809.6)		(3,059.3)	
Principal payments on certain capital leases	(72.9)		(78.6)		(12.1)		(8.0)		(85.0)		(86.6)	
Adjusted FCF	107.8	\$	745.2	\$	1,289.4	\$	805.6	\$	1,397.2	\$	1,550.8	
Pro forma adjustments for sale of Discontinued European Operations related to:												
Interest and derivative payments ^(III)	91.7											
Transition services agreements ^(IV)	189.2											
Pro forma Adjusted FCF ^(V)	\$ 388.7											

(iiii)

Adjusted free cash flow for the three months and year ended December 30, 2017 has been restated to reflect our January 1, 2018 adoption of ASU 2016-18, Restricted Cash.

For purposes of our consolidated statements of cash flows, expenses financed by an intermediary are treated as hypothetical operating cash outflows and hypothetical financing cash inflows when the expenses are incurred. When we pay the financing intermediary, we record financing cash outflows in our consolidated statements of cash flows. For purposes of our Adjusted Free Cash Flow definition, we add back the hypothetical operating cash outflow when these financed expenses are incurred and deduct the financing cash outflows when we pay the financing intermediary.

No debt, interest expense or derivative instruments of the UPC Holding borrowing group, other than with respect to certain borrowings that are direct obligations of the entities to be disposed, has been allocated to discontinued operations in the consolidated financial statements that are included in our 10-K. Notwithstanding the foregoing, we expect to use proceeds from the dispositions of the Vodafone Disposal Group and UPC DTH, and have used proceeds from the July 31, 2018 sale of UPC Austria, to repay debt of the UPC Holding borrowing group to the extent necessary to maintain a leverage ratio that is approximately four to five times UPC Holding's Covenant EBITDA. As a result, this pro forma adjustment represents the estimated interest and related derivative payments that would not have been made by UPC Holding if the sale of the Discontinued European Operations had been completed on January 1, 2018. These estimated payments are calculated based on the Discontinued European Operation's pro rata share of UPC Holding's OCF and UPC Holding's aggregate interest and derivative payments during the applicable period. Although we believe that these estimated payments represent a reasonable estimate of the reduction in annual interest and related derivative payments that will occur as a result of the sale of the Discontinued European Operations, no assurance can be given that the actual debt repayments will result in reductions equivalent to the amounts presented. No pro forma adjustments are required with respect to Unitymedia's interest and derivative payments as substantially all of Unitymedia's debt and related derivative instruments are direct obligations of entities within the Vodafone Disposal Group. As a result, the interest and related derivative payments associated with such debt and derivative instruments of Unitymedia are included in discontinued operations.

(iv) Represents our preliminary estimate of the net cash flows that we would have received from transition services agreements if the sale of the Discontinued European Operations had occurred on January 1, 2018. The estimated net cash flows are based on the estimated revenue that we expect to recognize from our transition services agreements during the first 12 months following the completion of the sale of the Discontinued European Operations, less the estimated incremental costs that we expect to incur to provide such transition services.

(v) Represents the Adjusted FCF that we estimate would have resulted if the sale of the Discontinued European Operations had been completed on January 1, 2018. Actual amounts may differ from the amounts assumed for purposes of this pro forma calculation. For example, our Pro forma Adjusted FCF does not include any future benefits related to reductions in our corporate costs as a result of our operating model rationalization or any other potential future operating or capital cost reductions attributable to our continuing or discontinued operations.

ARPU: Average Revenue Per Unit is the average monthly subscription revenue per average cable customer relationship or mobile subscriber, as applicable. Following the adoption of ASU 2014-09. subscription revenue excludes interconnect fees, channel carriage fees, mobile handset sales and late fees, but includes the amortization of installation fees. Prior to the adoption of ASU 2014-09, installation fees were excluded from subscription revenue. ARPU per average cable customer relationship is calculated by dividing the average monthly subscription revenue from residential cable and SOHO services by the average number of cable customer relationships for the period. ARPU per average mobile subscriber is calculated by dividing residential mobile and SOHO revenue for the indicated period by the average number of mobile subscribers for the period. Unless otherwise indicated, ARPU per cable customer relationship or mobile subscriber is not adjusted for currency impacts. ARPU per RGU refers to average monthly revenue per average RGU, which is calculated by dividing the average monthly subscription revenue from residential and SOHO services for the indicated period. by the average number of the applicable RGUs for the period. Unless otherwise noted, ARPU in this presentation is considered to be ARPU per average cable customer relationship or mobile subscriber, as applicable. Cable customer relationships, mobile subscribers and RGUs of entities acquired during the period are normalized. In addition, for purposes of calculating the percentage change in ARPU on a rebased basis, we adjust the prior-year subscription revenue, cable customer relationships, mobile subscribers and RGUs, as

applicable, to reflect acquisitions, dispositions, FX and the January 1, 2018 adoption of the new revenue recognition standard (ASU 2014-09, Revenue from Contracts with Customers) on a comparable basis with the current year, consistent with how we calculate our rebased growth for revenue and OCF.

ARPU per Mobile Subscriber: Our ARPU per mobile subscriber calculation that excludes interconnect revenue refers to the average monthly mobile subscription revenue per average mobile subscription revenue (excluding handset sales and late fees) for the indicated period, by the average of the opening and closing balances of mobile subscriber calculation that includes interconnect revenue increases the numerator in the above-described calculation by the amount of mobile interconnect revenue during the period.

Basic Video Subscriber: a home, residential multiple dwelling unit or commercial unit that receives our video service over our broadband network either via an analog video signal or via a digital video signal without subscribing to any recurring monthly service that requires the use of encryption-enabling technology. Encryption-enabling technology includes smart cards, or other integrated or virtual technologies that we use to provide our enhanced service offerings. We count RGUs on a unique premises basis. In other words, a subscriber with multiple outlets in one premises is counted as one RGU and a subscriber with two homes and a subscription to our video service at each home is counted as two RGUs.

Blended fully-swapped debt borrowing cost: the weighted average interest rate on our aggregate variable- and fixed-rate indebtedness (excluding capital leases and including vendor financing obligations), including the effects of derivative instruments, original issue premiums or discounts and commitment fees, but excluding the impact of financing costs.

B2B: Business-to-Business.

Cable Customer Relationships: the number of customers who receive at least one of our video, internet or telephony services that we count as RGUs, without regard to which or to how many services they subscribe. Cable Customer Relationships generally are counted on a unique premises basis. Accordingly, if an individual receives our

services in two premises (e.g., a primary home and a vacation home), that individual generally will count as two Cable Customer Relationships. We exclude mobile-only customers from Cable Customer Relationships.

Customer Churn: the rate at which customers relinquish their subscriptions. The annual rolling average basis is calculated by dividing the number of disconnects during the preceding 12 months by the average number of customer relationships. For the purpose of computing churn, a disconnect is deemed to have occurred if the customer no longer receives any level of service from us and is required to return our equipment. A partial product downgrade, typically used to encourage customers to pay an outstanding bill and avoid complete service disconnection, is not considered to be disconnected for purposes of our churn calculations. Customers who move within our cable footprint and upgrades and downgrades between services are also excluded from the disconnect figures used in the churn calculation.

<u>DTH Subscriber:</u> a home, residential multiple dwelling unit or commercial unit that receives our video programming broadcast directly via a geosynchronous satellite.

Enhanced Video Subscriber: a home, residential multiple dwelling unit or commercial unit that receives our video service over our broadband network or through a partner network via a digital video signal while subscribing to any recurring monthly service that requires the use of encryption-enabling technology. Enhanced Video Subscribers are counted on a unique premises basis. For example, a subscriber with one or more set-top boxes that receives our video service in one premises is generally counted as just one subscriber. An Enhanced Video Subscriber is not counted as a Basic Video Subscriber. As we migrate customers from basic to enhanced video services, we report a decrease in our Basic Video Subscribers equal to the increase in our Enhanced Video Subscribers.

Homes Passed: homes, residential multiple dwelling units or commercial units that can be connected to our networks without materially extending the distribution plant, except for DTH homes. Certain of our Homes Passed counts are based on census data that can change based on either revisions to the data or from new census results. We do not count homes passed for DTH.

Internet Subscriber: a home, residential multiple dwelling unit or commercial unit that receives internet services over our networks, or that we service through a partner network. Our Internet Subscribers do not include customers that receive services from dial-up connections.

MDU: Multiple Dwelling Unit.

Leverage and Liquidity: Consistent with how we calculate our leverage ratios under our debt agreements. we calculate our debt ratios on a Full Company basis, with the gross and net debt ratios defined as total debt and net debt, respectively, divided by annualized OCF of the latest guarter. Net debt is defined as total debt less cash and cash equivalents. For purposes of these calculations, debt is measured using swapped foreign currency rates, consistent with the covenant calculation requirements of our subsidiary debt agreements, and excludes the loans backed or secured by the shares we hold in ITV plc and Lions Gate Entertainment Corp. We have not presented leverage ratios on a continuing operations basis as we believe that such a presentation would overstate our leverage and would not be representative of the actual leverage ratios that we will report once all dispositions are completed. This is due to the fact that our continuing operations exclude all of the OCF of the entities to be disposed but include a portion of the debt that we expect to repay with the proceeds from such dispositions. For additional information, see the details of our pro forma Adjusted FCF within the Glossary of this presentation and note 4 to the condensed consolidated financial statements included in our 10-Q.

Liquidity refers to cash and cash equivalents plus the maximum undrawn commitments under subsidiary borrowing facilities, without regard to covenant compliance calculations.

MDU: Multiple Dwelling Unit.

Mobile Subscriber Count: the number of active SIM cards in service rather than services provided. For example, if a mobile subscriber has both a data and voice plan on a smartphone this would equate to one mobile subscriber. Alternatively, a subscriber who has a voice and data plan for a mobile handset and a data plan for a laptop would be counted as two mobile subscribers. Customers who do not pay a recurring monthly fee are excluded from our mobile telephony subscriber counts after periods of inactivity ranging from 30 to 90 days, based on industry standards within the respective country. In a number of countries, our mobile subscribers receive mobile services pursuant to prepaid contracts.

MVNO: Mobile Virtual Network Operator.

NPS: Net Promoter Score.

OCF: As used herein, OCF has the same meaning as the term "Adjusted OIBDA" that is referenced in our 10-K. OCF is the primary measure used by our chief operating decision maker to evaluate segment operating performance. OCF 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, OCF 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 OCF 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. We believe our OCF measure is useful to investors because it is one of the bases for comparing our performance with the performance of other companies in the same or similar industries, although our measure may not be directly comparable to similar measures used by other public companies. OCF should be viewed as a measure of operating performance that is a supplement to, and not a substitute for, operating income, net earnings or loss, cash flow from operating activities and other U.S. GAAP measures of income or cash flows. A reconciliation of our operating income to total OCF is presented in the following table:

	Three months ended December 31,								Year ended December 31,								
	2018				2017 ⁸				2018				2017 ^s				
	Continuing operations		(Full Company		Continuing operations		Full Company		Continuing operations		Full Company		Continuing operations		Full Company	
		in millions															
Operating income	\$	252.4	\$	781.2	\$	145.6	\$	479.5	\$	839.1	\$	2,776.8	\$	760.5	\$	1,886.2	
Share-based compensation expense		75.0		79.5		60.4		63.9		206.0		221.2		162.2		174.0	
Depreciation and amortization		924.0		929.1		1,064.0		1,333.7		3,858.2		4,238.0		3,790.6		4,857.0	
Impairment, restructuring and other operating items, net		50.2		65.9		19.5		20.5		248.2		278.3		79.9		107.2	
Total OCF	\$	1,301.6	\$	1,855.7	\$	1,289.5	\$	1,897.6	\$	5,151.5	\$	7,514.3	\$	4,793.2	\$	7,024.4	

OCF margin: calculated by dividing OCF by total revenue for the applicable period.

OFCF: As used herein, OFCF represents OCF less property and equipment additions. OFCF margin is calculated by dividing OFCF by total revenue for the applicable period. OFCF and OFCF margin are metrics that we use, along with Adjusted FCF, to measure the relative ability of an entity to generate cash from its operations, after considering capital requirements. For limitations of OFCF and OFCF margin, see the definition of Adjusted FCF.

Property and equipment additions (P&E Additions): includes capital expenditures on an accrual basis, amounts financed under vendor financing or capital lease arrangements and other non-cash additions.

RGU: A Revenue Generating Unit is separately a Basic Video Subscriber, Enhanced Video Subscriber, DTH Subscriber, Internet Subscriber or Telephony Subscriber. A home, residential multiple dwelling unit, or commercial unit may contain one or more RGUs. For example, if a residential customer in our U.K. market subscribed to our enhanced video service, fixed-line telephony service and broadband internet service, the customer would constitute three RGUs. Total RGUs is the sum of Basic Video, Enhanced Video, DTH, Internet and Telephony Subscribers. RGUs generally are counted on a unique premises basis such that a given premises does not count as more than one RGU for any given service. On the other hand, if an individual receives one of our services in two premises (e.g., a primary home and a vacation home), that individual will count as two RGUs for that service. Each bundled cable, internet or telephony service is counted as a separate RGU regardless of the nature of any bundling discount or promotion. Non-paving subscribers are counted as subscribers during their free promotional service period. Some of these subscribers may choose to disconnect after their free service period. Services offered without charge on a long-term basis (e.g., VIP subscribers or free service to employees) generally are not counted as RGUs. We do not include subscriptions to mobile services in our externally reported RGU counts. In this regard, our RGU counts exclude our separately reported postpaid and prepaid mobile subscribers.

SIM: Subscriber Identification Module

SOHO: Small or Home Office Subscribers

Telephony Subscriber: a home, residential multiple dwelling unit or commercial unit that receives voice services over our networks, or that we service through a partner network. Telephony Subscribers exclude mobile telephony subscribers.

Two-way Homes Passed: homes passed by those sections of our networks that are technologically capable of providing two-way services, including video, internet and telephony services.

U.S. GAAP: United States Generally Accepted Accounting Principles.

YoY: Year-over-year.

APPENDIX - LIGHTNING

The presentation of revenue and OCF for Virgin Media's Lightning represents "Incremental Revenue" and "Incremental OCF", respectively, which is supplemental non-GAAP information that has a different meaning than the revenue and OCF we report for our operating segments that are used by our chief operating decision maker to evaluate segment operating performance.

As we use these terms, Incremental Revenue and Incremental OCF include only the revenue and expenses directly associated with the homes built under Lightning since its launch in the third quarter of 2015. The direct and incremental expenses associated with Lightning include certain non-capitalizeable customer installations, programming (on a per subscriber basis when above the overall minimum guaranteed contractual amount across our consolidated subscriber base), third party network traffic, billing and collections, certain call center and other operating costs related to personnel dedicated to Lighting. Incremental OCF excludes significant costs incurred that would otherwise be included if Virgin Media's Lightning was operated as a standalone segment or operating entity and excludes indirect costs related to functions required to support Project Lighting. Specifically, among other expenses, Incremental OCF excludes allocations of broadband network taxes, general corporate costs and administrative, general network operations, information technology, facilities, commercial, and general sales and marketing costs.

We have presented Incremental Revenue and Incremental OCF for Lightning as these measures are used by our internal decision makers to assist in the evaluation of (1) the operating trends of Lightning and (2) the Incremental OCF contributions on capital invested in Lightning. For these reasons, Incremental OCF is not a substitute for Segment OCF, which is our key performance indicator, nor should it be solely used to evaluate the "rest of business" OCF results as presented in our slide. OFCF as presented for Lightning represents Lightning's Incremental OCF net of property, plant and equipment additions as determined in accordance with GAAP. We have not attributed any of our Central T&I opex and capex to Lightning in this presentation.



APPENDIX - BELGIUM

For purposes of its standalone reporting obligations, Telenet prepares its consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the European Union (EU IFRS).

Adjusted Free Cash Flow: Adjusted Free Cash Flow is defined as net cash provided by Telenet's operating activities, plus (i) cash payments for third-party costs directly associated with successful and unsuccessful acquisitions and divestitures and (ii) expenses financed by an intermediary, less (i) purchases of property and equipment and purchases of intangibles as reported in the Company's consolidated statement of cash flows, (ii) principal payments on amounts financed by vendors and intermediaries, (iii) principal payments on capital leases (exclusive of network-related leases that were assumed in acquisitions), and (iv) principal payments on post acquisition additions to network leases, each as reported in Telenet's consolidated statement of cash flow is an additional measure used by management to demonstrate Telenet's ability to service debt and fund new investment opportunities and should not replace the measures in accordance with EU IFRS as an indicator of Telenet's performance, but rather should be used in conjunction with the most directly comparable EU IFRS measure.

Adjusted Free Cash Flow is a non-GAAP measure as contemplated by the U.S. Securities and Exchange Commission. A reconciliation of Telenet's Adjusted Free Cash Flow for 2018 is provided below.

A reconciliation of Telenet's Adjusted Free Cash Flow guidance for 2019 to an EU IFRS measure is not provided, as not all elements of the reconciliation are projected as part of Telenet's forecasting process and certain items may vary significantly from one period to another.

	Year ended December 31, 2018			
		in millions		
Net cash provided by operating activities	€	1,075.6		
Cash payments for direct acquisition and disposition costs		3.9		
Expenses financed by an intermediary		158.7		
Purchases of property and equipment		(245.8)		
Purchases of intangibles		(157.9)		
Principal payments on amounts financed by vendors and intermediaries		(384.5)		
Principal payments on capital leases (excluding network-related leases assumed in acquisitions)		(5.7)		
Principal payments on post-acquisition additions to network leases		(22.4)		
Adjusted FCF	€	421.9		

