UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
Form 10-Q

☑ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2018

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission file number 001-35961

LIBERTY GLOBAL®

Liberty Global plc
(Exact name of Registrant as specified in its charter)

England and Wales	**98-1112770**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*
Griffin House, 161 Hammersmith Rd, London, United Kingdom	**W6 8BS**
(Address of principal executive offices)	*(Zip Code)*

Registrant's telephone number, including area code:
+44.208.483.6449 or 303.220.6600

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files) and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☑ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large Accelerated Filer ☑ Accelerated Filer ☐ Non-Accelerated Filer (Do not check if a smaller reporting company) ☐

Smaller Reporting Company ☐ Emerging Growth Company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act ☐

Indicate by check mark whether the registrant is a shell company as defined in Rule 12b-2 of the Exchange Act. Yes ☐ No ☑

The number of outstanding ordinary shares of Liberty Global plc as of July 31, 2018 was: 206,574,606 class A ordinary shares, 11,102,619 class B ordinary shares and 552,079,017 class C ordinary shares.

LIBERTY GLOBAL PLC

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LIBERTY GLOBAL PLC
CONDENSED CONSOLIDATED BALANCE SHEETS
(unaudited)

	June 30, 2018	December 31, 2017
	in millions	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 862.4	$ 1,672.4
Trade receivables, net	1,323.6	1,411.0
Derivative instruments (note 6)	385.3	494.4
Prepaid expenses	197.0	133.8
Current assets of discontinued operations (note 4)	425.2	268.1
Other current assets (notes 3 and 5)	378.0	351.9
Total current assets	3,571.5	4,331.6
Investments and related note receivables (including $2,164.1 million and $2,315.3 million, respectively, measured at fair value on a recurring basis) (note 5)	6,317.8	6,671.4
Property and equipment, net (note 8)	14,053.0	14,245.3
Goodwill (note 8)	13,999.2	14,354.1
Deferred tax assets (note 10)	3,135.6	3,133.1
Long-term assets of discontinued operations (note 4)	10,933.8	11,141.1
Other assets, net (notes 3, 6 and 8)	3,700.0	3,720.2
Total assets	$ 55,710.9	$ 57,596.8

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

LIBERTY GLOBAL PLC
CONDENSED CONSOLIDATED BALANCE SHEETS — (Continued)
(unaudited)

	June 30, 2018	December 31, 2017
	in millions	
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	$ 831.0	$ 934.1
Deferred revenue	846.2	942.2
Current portion of debt and capital lease obligations (note 9)	3,392.6	3,680.1
Accrued capital expenditures	458.6	581.7
Current liabilities of discontinued operations (note 4)	1,873.1	1,587.7
Other accrued and current liabilities (notes 6 and 13)	2,583.4	2,240.0
Total current liabilities	9,984.9	9,965.8
Long-term debt and capital lease obligations (note 9)	28,425.9	29,023.4
Long-term liabilities of discontinued operations (note 4)	10,125.4	9,967.6
Other long-term liabilities (notes 6, 10, and 13)	2,422.8	2,247.0
Total liabilities	50,959.0	51,203.8
Commitments and contingencies (notes 6, 9, 10 and 15)		
Equity (note 11):		
Liberty Global shareholders:		
Class A ordinary shares, $0.01 nominal value. Issued and outstanding 207,403,209 and 219,668,579 shares, respectively	2.1	2.2
Class B ordinary shares, $0.01 nominal value. Issued and outstanding 11,102,619 shares at each date	0.1	0.1
Class C ordinary shares, $0.01 nominal value. Issued and outstanding 555,820,059 and 584,332,055 shares, respectively	5.6	5.8
Additional paid-in capital	10,095.5	11,358.6
Accumulated deficit	(6,171.4)	(6,217.6)
Accumulated other comprehensive earnings, net of taxes	1,186.4	1,656.0
Treasury shares, at cost	(0.1)	(0.1)
Total Liberty Global shareholders	5,118.2	6,805.0
Noncontrolling interests	(366.3)	(412.0)
Total equity	4,751.9	6,393.0
Total liabilities and equity	$ 55,710.9	$ 57,596.8

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

LIBERTY GLOBAL PLC
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(unaudited)

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in millions, except per share amounts			
Revenue (notes 3, 5 and 16)	$ 3,045.1	$ 2,774.9	$ 6,139.6	$ 5,444.7
Operating costs and expenses (exclusive of depreciation and amortization, shown separately below):				
Programming and other direct costs of services	818.0	704.6	1,677.4	1,418.1
Other operating (note 12)	431.2	409.0	899.2	804.9
Selling, general and administrative (**SG&A**) (note 12)	531.6	517.3	1,069.6	1,000.2
Depreciation and amortization	970.2	922.0	2,017.5	1,789.7
Impairment, restructuring and other operating items, net (note 13)	30.2	13.1	91.6	6.4
	2,781.2	2,566.0	5,755.3	5,019.3
Operating income	263.9	208.9	384.3	425.4
Non-operating income (expense):				
Interest expense	(381.1)	(348.8)	(757.0)	(688.3)
Realized and unrealized gains (losses) on derivative instruments, net (note 6)	675.5	(351.7)	464.2	(596.1)
Foreign currency transaction gains (losses), net	52.1	(18.2)	(49.6)	11.0
Realized and unrealized gains (losses) due to changes in fair values of certain investments and debt, net (notes 5, 7 and 9)	61.5	(141.4)	4.3	(42.6)
Losses on debt modification and extinguishment, net (note 9)	(20.1)	(53.6)	(22.7)	(98.9)
Share of losses of affiliates, net (note 5)	(82.3)	(3.6)	(118.8)	(19.3)
Other income, net	6.4	15.8	16.2	32.4
	312.0	(901.5)	(463.4)	(1,401.8)
Earnings (loss) from continuing operations before income taxes	575.9	(692.6)	(79.1)	(976.4)
Income tax benefit (expense) (note 10)	92.8	(68.7)	(617.2)	(150.4)
Earnings (loss) from continuing operations	668.7	(761.3)	(696.3)	(1,126.8)
Earnings from discontinued operations, net of taxes (note 4)	281.8	108.9	468.2	207.2
Net earnings (loss)	950.5	(652.4)	(228.1)	(919.6)
Net earnings attributable to noncontrolling interests	(37.9)	(21.9)	(45.8)	(74.9)
Net earnings (loss) attributable to Liberty Global shareholders	$ 912.6	$ (674.3)	$ (273.9)	$ (994.5)
Basic earnings (loss) from continuing operations attributable to Liberty Global shareholders per share (note 14)	$ 0.80	$ (0.90)	$ (0.93)	$ (1.34)
Diluted earnings (loss) from continuing operations attributable to Liberty Global shareholders per share (note 14)	$ 0.80	$ (0.90)	$ (0.93)	$ (1.34)

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

LIBERTY GLOBAL PLC
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE EARNINGS (LOSS)
(unaudited)

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in millions			
Net earnings (loss)	$ 950.5	$ (652.4)	$ (228.1)	$ (919.6)
Other comprehensive earnings (loss), net of taxes:				
Continuing operations:				
Foreign currency translation adjustments	(1,012.6)	875.8	(431.7)	1,122.2
Pension-related adjustments and other	(6.2)	(1.1)	(7.1)	(2.6)
Other comprehensive earnings (loss) from continuing operations	(1,018.8)	874.7	(438.8)	1,119.6
Other comprehensive loss from discontinued operations	(45.2)	(4.2)	(33.0)	(9.2)
Other comprehensive earnings (loss)	(1,064.0)	870.5	(471.8)	1,110.4
Comprehensive earnings (loss)	(113.5)	218.1	(699.9)	190.8
Comprehensive earnings attributable to noncontrolling interests	(35.7)	(22.0)	(43.6)	(74.5)
Comprehensive earnings (loss) attributable to Liberty Global shareholders	$ (149.2)	$ 196.1	$ (743.5)	$ 116.3

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

LIBERTY GLOBAL PLC
CONDENSED CONSOLIDATED STATEMENT OF EQUITY
(unaudited)

	Liberty Global shareholders									
	Ordinary shares									
	Class A	Class B	Class C	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, 2018, before effect of accounting change	$ 2.2	$ 0.1	$ 5.8	$ 11,358.6	$ (6,217.6)	$ 1,656.0	$ (0.1)	$ 6,805.0	$ (412.0)	$ 6,393.0
Accounting change (note 2)	—	—	—	—	320.1	—	—	320.1	4.4	324.5
Balance at January 1, 2018, as adjusted for accounting change	2.2	0.1	5.8	11,358.6	(5,897.5)	1,656.0	(0.1)	7,125.1	(407.6)	6,717.5
Net loss	—	—	—	—	(273.9)	—	—	(273.9)	45.8	(228.1)
Other comprehensive loss, net of taxes	—	—	—	—	—	(469.6)	—	(469.6)	(2.2)	(471.8)
Repurchase and cancellation of Liberty Global ordinary shares (note 11)	(0.1)	—	(0.2)	(1,288.0)	—	—	—	(1,288.3)	—	(1,288.3)
Share-based compensation (note 12)	—	—	—	84.4	—	—	—	84.4	—	84.4
Adjustments due to changes in subsidiaries' equity and other, net	—	—	—	(59.5)	—	—	—	(59.5)	(2.3)	(61.8)
Balance at June 30, 2018	$ 2.1	$ 0.1	$ 5.6	$ 10,095.5	$ (6,171.4)	$ 1,186.4	$ (0.1)	$ 5,118.2	$ (366.3)	$ 4,751.9

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

LIBERTY GLOBAL PLC
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(unaudited)

	Six months ended June 30,	
	2018	**2017**
	in millions	
Cash flows from operating activities:		
Net loss	$ (228.1)	$ (919.6)
Earnings from discontinued operations	468.2	207.2
Loss from continuing operations	(696.3)	(1,126.8)
Adjustments to reconcile loss from continuing operations to net cash provided by operating activities from continuing operations:		
Share-based compensation expense	88.2	80.3
Depreciation and amortization	2,017.5	1,789.7
Impairment, restructuring and other operating items, net	91.6	6.4
Amortization of deferred financing costs and non-cash interest	29.1	31.6
Realized and unrealized losses (gains) on derivative instruments, net	(464.2)	596.1
Foreign currency transaction losses (gains), net	49.6	(11.0)
Realized and unrealized losses (gains) due to changes in fair values of certain investments and debt, net	(4.3)	42.6
Losses on debt modification and extinguishment, net	22.7	98.9
Share of losses of affiliates, net	118.8	19.3
Deferred income tax benefit	(125.3)	(25.4)
Changes in operating assets and liabilities, net of the effects of acquisitions and dispositions	885.4	(48.1)
Dividends from affiliates and others	130.1	104.8
Net cash provided by operating activities of continuing operations	2,142.9	1,558.4
Net cash provided by operating activities of discontinued operations	1,122.2	1,153.2
Net cash provided by operating activities	3,265.1	2,711.6
Cash flows from investing activities:		
Capital expenditures, net	(797.8)	(588.0)
Cash paid in connection with acquisitions, net of cash acquired	(71.7)	(438.6)
Investments in and loans to affiliates and others	(56.8)	(64.7)
Distributions received from affiliates	—	1,569.4
Equalization payment related to the VodafoneZiggo JV Transaction	—	845.3
Other investing activities, net	30.0	(4.3)
Net cash provided (used) by investing activities of continuing operations	(896.3)	1,319.1
Net cash used by investing activities of discontinued operations	(281.0)	(607.0)
Net cash provided (used) by investing activities	$ (1,177.3)	$ 712.1

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

LIBERTY GLOBAL PLC
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS — (continued)
(unaudited)

	Six months ended June 30,	
	2018	2017
	in millions	
Cash flows from financing activities:		
Repayments and repurchases of debt and capital lease obligations	$ (3,836.4)	$ (4,698.3)
Borrowings of debt	2,146.5	4,597.9
Repurchase of Liberty Global ordinary shares	(1,276.2)	(2,108.7)
Payment of financing costs and debt premiums	(39.5)	(122.0)
Net cash received (paid) related to derivative instruments	10.2	(139.0)
Value-added taxes (**VAT**) paid on behalf of the VodafoneZiggo JV	—	(162.6)
Other financing activities, net	(42.1)	(44.3)
Net cash used by financing activities of continuing operations	(3,037.5)	(2,677.0)
Net cash provided (used) by financing activities of discontinued operations	155.3	(80.0)
Net cash used by financing activities	(2,882.2)	(2,757.0)
Effect of exchange rate changes on cash and cash equivalents and restricted cash:		
Continuing operations	(9.3)	93.7
Discontinued operations	—	(2.7)
Total	(9.3)	91.0
Net increase (decrease) in cash and cash equivalents and restricted cash:		
Continuing operations	(1,800.2)	294.2
Discontinued operations - Vodafone Disposal Group and UPC Austria	996.5	405.5
Discontinued operations - LiLAC Group	—	58.0
Total	$ (803.7)	$ 757.7
Cash and cash equivalents and restricted cash:		
Beginning of period	$ 1,683.0	$ 1,087.4
Net increase (decrease) (excluding, during the 2017 period, LiLAC Group activity related to cash balances included in discontinued operations)	(803.7)	699.7
End of period	$ 879.3	$ 1,787.1
Cash paid for interest:		
Continuing operations	$ 714.8	$ 717.8
Discontinued operations	222.3	432.6
Total	$ 937.1	$ 1,150.4
Net cash paid for taxes:		
Continuing operations	$ 174.4	$ 216.0
Discontinued operations	12.8	70.4
Total	$ 187.2	$ 286.4
Details of end of period cash and cash equivalents and restricted cash:		
Cash and cash equivalents	$ 862.4	$ 1,090.7
Restricted cash included in other current assets and other assets, net	14.9	694.4
Restricted cash included in current and long-term assets of discontinued operations	2.0	2.0
Total cash and cash equivalents and restricted cash	$ 879.3	$ 1,787.1

The accompanying notes are an integral part of these condensed 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 in Europe.

Our continuing operations comprise businesses that provide residential and business-to-business (**B2B**) communication services in (i) the United Kingdom (**U.K.**) and Ireland through Virgin Media Inc. (**Virgin Media**), a wholly-owned subsidiary of Liberty Global, (ii) Belgium through Telenet Group Holding N.V. (**Telenet**), a 57.7%-owned subsidiary, and (iii) Switzerland and Poland through UPC Holding B.V. and (iv) Slovakia through UPC Broadband Slovakia s.r.o. UPC Holding B.V. and UPC Broadband Slovakia s.r.o., which are each wholly-owned subsidiaries of Liberty Global, are collectively referred to herein as "**UPC Holding**." In addition, we own a 50% noncontrolling interest in the VodafoneZiggo JV (as defined in note 5), which provides video, broadband internet, fixed-line telephony, mobile and B2B services in the Netherlands.

In addition, (i) we currently provide residential and B2B communication services in Germany through Unitymedia GmbH (**Unitymedia)** and in Romania, Hungary and the Czech Republic through UPC Holding B.V. and (ii) through July 31, 2018, we provided residential and B2B communication services in Austria through UPC Holding B.V. On May 9, 2018, we reached an agreement to sell our operations in Germany, Romania, Hungary and the Czech Republic, and on July 31, 2018, we completed the sale of our operations in Austria. In these condensed consolidated financial statements, the operations in each of these countries are reflected as discontinued operations for all periods presented. For additional information regarding these pending and completed dispositions, see note 4.

Prior to the completion of the Split-off Transaction (as defined and described in note 4), we also provided residential and B2B services in (i) 18 countries, predominantly in Latin America and the Caribbean, through Cable &Wireless Communications Limited (**C&W**), (ii) Chile through VTR.com SpA (**VTR**) and (iii) Puerto Rico through Liberty Cablevision of Puerto Rico LLC (**Liberty Puerto Rico**). C&W and VTR were wholly-owned subsidiaries, and Liberty Puerto Rico was an entity in which we held a 60.0% ownership interest. C&W also provided (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 connected over 40 markets in that region. The operations of C&W, VTR, Liberty Puerto Rico and certain other entities that were associated with our businesses in Latin America and the Caribbean are collectively referred to herein as the "**LiLAC Group**." As a result of the Split-off Transaction, the entities attributed to the LiLAC Group are reflected as discontinued operations in our condensed consolidated statements of operations and cash flows for the three and six months ended June 30, 2017.

Unless otherwise noted, the amounts presented in these notes relate only to our continuing operations.

Our unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States (**U.S. GAAP**) and with the instructions to Form 10-Q and Article 10 of Regulation S-X for interim financial information. Accordingly, these financial statements do not include all of the information required by U.S. GAAP or Securities and Exchange Commission rules and regulations for complete financial statements. In the opinion of management, these financial statements reflect all adjustments (consisting of normal recurring adjustments) necessary for a fair presentation of the results of operations for the interim periods presented. The results of operations for any interim period are not necessarily indicative of results for the full year. These unaudited condensed consolidated financial statements should be read in conjunction with our 2017 consolidated financial statements and notes thereto included in our 2017 Annual Report on Form 10-K (our **10-K**).

The preparation of financial statements in conformity with 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, certain components of revenue, programming and copyright costs, 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.

Unless otherwise indicated, ownership percentages and convenience translations into United States (**U.S.**) dollars are calculated as of June 30, 2018.

Certain prior period amounts have been reclassified to conform to the current period presentation.

(2) Accounting Changes and Recent Accounting Pronouncements

Accounting Changes

ASU 2014-09

In May 2014, the Financial Accounting Standards Board (**FASB**) issued Accounting Standards Update (**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 goods or services to customers. We adopted ASU 2014-09 effective January 1, 2018 by recording the cumulative effect of the adoption to our accumulated deficit. We applied the new standard to contracts that were not complete at January 1, 2018. The comparative information for the three and six months ended June 30, 2017 contained within these condensed consolidated financial statements and notes has not been restated and continues to be reported under the accounting standards in effect for such period. The implementation of ASU 2014-09 did not have a material impact on our consolidated financial statements.

The principal impacts of ASU 2014-09 on our revenue recognition policies relate to our accounting for (i) time-limited discounts and free service periods provided to our customers and (ii) certain upfront fees charged to our customers, as follows:

- When we enter into contracts to provide services to our customers, we often provide time-limited discounts or free service periods. Under previous accounting rules, we recognized revenue, net of discounts, during the promotional periods and did not recognize any revenue during free service periods. Under ASU 2014-09, revenue recognition for those contracts that contain substantive termination penalties is accelerated, as the impact of the discounts or free service periods is recognized uniformly over the contractual period. For contracts that do not have substantive termination penalties, we continue to record the impacts of partial or full discounts during the applicable promotional periods.

- When we enter into contracts to provide services to our customers, we often charge installation or other upfront fees. Under previous accounting rules, installation fees related to services provided over our cable networks were recognized as revenue during the period in which the installation occurred to the extent these fees were equal to or less than direct selling costs. Under ASU 2014-09, these fees are generally deferred and recognized as revenue over the contractual period, or longer if the upfront fee results in a material renewal right.

ASU 2014-09 also impacted our accounting for certain upfront costs directly associated with obtaining and fulfilling customer contracts. Under our previous policy, these costs were expensed as incurred unless the costs were in the scope of another accounting topic that allowed for capitalization. Under ASU 2014-09, certain upfront costs associated with contracts that have substantive termination penalties and a term of one year or more are recognized as assets and amortized to operating costs and expenses over the applicable period benefited.

For additional information regarding our adoption of ASU 2014-09, see note 3.

The cumulative effect of the adoption of ASU 2014-09 on our summary balance sheet information as of January 1, 2018 is as follows:

	Balance at December 31, 2017	ASU 2014-09 Adjustments	Balance at January 1, 2018
		in millions	
Assets:			
Trade receivables, net	$ 1,411.0	(0.7)	$ 1,410.3
Current assets of discontinued operations	$ 268.1	98.2	$ 366.3
Other current assets	$ 351.9	76.6	$ 428.5
Investments and related note receivables (a)	$ 6,671.4	191.2	$ 6,862.6
Deferred tax assets	$ 3,133.1	(16.0)	$ 3,117.1
Long-term assets of discontinued operations	$ 11,141.1	29.1	$ 11,170.2
Other assets, net	$ 3,720.2	21.4	$ 3,741.6
Liabilities:			
Deferred revenue	$ 942.2	5.6	$ 947.8
Current liabilities of discontinued operations	$ 1,587.7	26.7	$ 1,614.4
Other accrued and current liabilities	$ 2,240.0	1.2	$ 2,241.2
Long-term liabilities of discontinued operations	$ 9,967.6	39.1	$ 10,006.7
Other long-term liabilities	$ 2,247.0	2.7	$ 2,249.7
Equity:			
Accumulated deficit (a)	$ (6,217.6)	320.1	$ (5,897.5)
Noncontrolling interests	$ (412.0)	4.4	$ (407.6)

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(a) The ASU 2014-09 adjustment amounts include the impact of our share of the VodafoneZiggo JV's adjustment to its owners' equity.

The impact of our adoption of ASU 2014-09 on our condensed consolidated balance sheet as of June 30, 2018 was not materially different from the impacts set forth in the above January 1, 2018 summary balance sheet information. Similarly, the adoption of ASU 2014-09 did not have a material impact on our condensed consolidated statement of operations for the three and six months ended June 30, 2018.

ASU 2017-07

In March 2017, the FASB issued ASU No. 2017-07, *Improving the Presentation of the Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost* (**ASU 2017-07**), which changes the presentation of periodic benefit cost components. Under ASU 2017-07, we continue to present the service component of our net benefit cost as a component of operating income but present the other components of our net benefit cost, which can include credits, within non-operating income (expense) in our consolidated statements of operations. We adopted ASU 2017-07 on January 1, 2018 on a retrospective basis, which resulted in the reclassification of credits from SG&A expenses to other income, net, of $9.2 million for the six months ended June 30, 2017.

ASU 2016-01

In January 2016, the FASB issued ASU No. 2016-01, *Recognition and Measurement of Financial Assets and Financial Liabilities* (**ASU 2016-01**), which updates certain aspects of recognition, measurement, presentation and disclosure of financial instruments. ASU 2016-01 primarily impacts our accounting for certain equity investments that were previously accounted for under the cost method. Under ASU 2016-01, these investments, which do not have readily determinable fair values, are accounted for at cost minus impairment, adjusted for any observable price changes of similar investments of the same issuer. We adopted the amendments of ASU 2016-01 related to equity securities without readily determinable fair values on January 1, 2018 on a prospective basis.

ASU 2016-18

In November 2016, the FASB issued ASU No. 2016-18, *Restricted Cash* (**ASU 2016-18**), which requires the change in restricted cash to be included together with the change in cash and cash equivalents in our consolidated statement of cash flows. We adopted ASU 2016-18 on January 1, 2018 on a retrospective basis.

Recent Accounting Pronouncements

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 right-of-use assets and lease liabilities on the balance sheet and additional disclosures. ASU 2016-02, as amended by ASU No. 2018-11, *Targeted Improvements*, requires lessees and lessors to recognize and measure leases at the beginning of the earliest period presented using one of two modified retrospective approaches. A number of optional practical expedients may be applied in transition. 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. We will adopt ASU 2016-02 on January 1, 2019 by recording the cumulative effect of adoption to our accumulated deficit.

Although we are currently evaluating the effect that ASU 2016-02 will have on our consolidated financial statements, the main impact of the adoption of this standard will be the recognition of right-of-use assets and lease liabilities in our consolidated balance sheet for those leases classified as operating leases under current U.S. GAAP. We do not intend to recognize right-of-use assets or lease liabilities for leases with a term of 12 months or less, as permitted by the short-term lease practical expedient in the standard. We also do not plan to apply the practical expedient that permits a lessee to account for lease and non-lease components in a contract as a single lease component and, accordingly, we will continue to account for these components separately. In transition, we plan to apply the practical expedients that permit us not to reassess (i) whether expired or existing contracts contain a lease under the new standard, (ii) the lease classification for expired or existing leases or (iii) whether previously-capitalized initial direct costs would qualify for capitalization under the new standard. In addition, we do not intend to use hindsight during transition.

For a summary of our undiscounted future minimum lease payments under non-cancellable operating leases as of June 30, 2018, see note 15. We currently do not expect ASU 2016-02 to have a significant impact on our consolidated statements of operations or cash flows.

(3) Revenue Recognition and Related Costs

Policies

Our revenue recognition and certain other accounting policies, as revised to reflect the impacts of our adoption of ASU 2014-09, are set forth below.

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 periods the related services are provided, with the exception of revenue recognized pursuant to certain contracts that contain promotional discounts, as described below. Installation fees related to services provided over our cable network are generally deferred and recognized as revenue over the contractual period, or longer if the upfront fee results in a material renewal right.

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 products or services based on the relative standalone selling price for each respective product or service.

Mobile Revenue — General. Consideration from mobile contracts is allocated to the airtime service component and the handset component based on the relative standalone selling prices of each component. In markets where we offer handsets and airtime services in separate contracts entered into at the same time, we account for these contracts as a single contract.

Mobile Revenue — Airtime Services. We recognize revenue from mobile services in the periods in which the related services are provided. Revenue from pre-pay customers is deferred prior to the commencement of services and recognized as the services are rendered or usage rights expire.

Mobile Revenue — Handset Revenue. Revenue from the sale of handsets is recognized at the point in which the goods have been transferred to the customer. Some of our mobile handset contracts that permit the customer to take control of the handset upfront and pay for the handset in installments over a contractual period may contain a significant financing component. For contracts with terms of one year or more, we recognize any significant financing component as revenue over the contractual period using the effective interest method. We do not record the effect of a significant financing component if the contractual period is less than one year.

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, generally over the longer of the term of the arrangement or the expected period of performance.

Contract Costs. Incremental costs to obtain a contract with a customer, such as incremental sales commissions, are generally recognized as assets and amortized to SG&A expenses over the applicable period benefited, which generally is the contract life. If, however, the amortization period is less than one year, we expense such costs in the period incurred.

Contract fulfillment costs, such as porting costs, are recognized as assets and amortized to other operating costs over the applicable period benefited, which is generally the substantive contract term for the related service contract.

Promotional Discounts. For subscriber promotions, such as discounted or free services during an introductory period, revenue is recognized uniformly over the contractual period if the contract has substantive termination penalties. If a contract does not have substantive termination penalties, revenue is recognized only to the extent of the discounted monthly fees charged to the subscriber, if any.

Subscriber Advance Payments. 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. Revenue is recorded net of applicable sales, use and other value-added taxes.

For a disaggregation of our revenue by major category and by reportable and geographic segment, see note 16.

Contract Balances

The timing of revenue recognition may differ from the timing of invoicing our customers. We record a trade receivable when we have transferred goods or services to a customer but have not yet received payment. Our trade receivables are reported net of an allowance for doubtful accounts. Such allowance aggregated $57.0 million and $89.5 million at June 30, 2018 and January 1, 2018, respectively.

If we transfer goods or services to a customer but do not have an unconditional right to payment, we record a contract asset. Contract assets typically arise from the uniform recognition of introductory promotional discounts over the contract period and accrued revenue for handset sales. Our contract assets were $27.7 million and $26.1 million as of June 30, 2018 and January 1, 2018, respectively. The current and long-term portions of our contract asset balance at June 30, 2018 are included within other current assets and other assets, net, respectively, in our condensed consolidated balance sheet.

We record deferred revenue when we receive payment prior to transferring goods or services to a customer. We primarily defer revenue for (i) installation and other upfront services and (ii) other services that are invoiced prior to when services are provided. Our deferred revenue balances were $889.2 million and $1,005.2 million as of June 30, 2018 and January 1, 2018, respectively. The decrease in deferred revenue for the six months ended June 30, 2018 is primarily due to $801.8 million of revenue recognized that was included in our deferred revenue balance at January 1, 2018, partially offset by advanced billings in certain markets. The current and long-term portions of our deferred revenue balance at June 30, 2018 are included within deferred revenue and other long-term liabilities, respectively, in our condensed consolidated balance sheet.

Contract Costs

Our aggregate assets associated with incremental costs to obtain and fulfill our contracts were $68.4 million and $68.1 million at June 30, 2018 and January 1, 2018, respectively. The current and long-term portions of our assets related to contract costs at June 30, 2018 are included within other current assets and other assets, net, respectively, in our condensed consolidated balance sheet. We amortized $28.5 million and $51.3 million to operating costs and expenses during the three and six months ended June 30, 2018, respectively, related to these assets.

Unsatisfied Performance Obligations

A large portion of our revenue is derived from customers who are not subject to contracts. Revenue from customers who are subject to contracts is generally recognized over the term of such contracts, which is typically 12 months for our residential service, one to three years for our mobile contracts and one to five years for our B2B contracts.

(4) Acquisitions and Dispositions

2017 Acquisition

On June 19, 2017, Telenet acquired Coditel Brabant sprl, operating under the SFR brand (**SFR BeLux**), for a cash and debt free purchase price of €369.0 million ($410.3 million at the applicable rates) (the **SFR BeLux Acquisition**) after post-closing adjustments. SFR BeLux provides cable and mobile services to households and businesses in Belgium and Luxembourg.

Pending and Completed Dispositions

Vodafone Disposal Group

On May 9, 2018, we reached an agreement (the **Vodafone Agreement**) to sell our operations in Germany, Romania, Hungary and the Czech Republic to Vodafone Group plc (**Vodafone**). The cash proceeds that we receive from the transaction will be calculated on the basis of the agreed enterprise value adjusted for the net debt and working capital of such businesses as of the closing date of the transaction, as well as other post-closing adjustments. Based on the net debt and working capital of such

businesses as of December 31, 2017, the cash proceeds would be approximately €10.6 billion ($12.4 billion). The operations of Germany, Romania, Hungary and the Czech Republic are collectively referred to herein as the "**Vodafone Disposal Group**."

Closing of the transaction is subject to various conditions, including regulatory approval, which is not expected until mid-2019. The Vodafone Agreement contains certain termination rights for both our company and Vodafone, including if closing has not occurred by November 9, 2019, or May 9, 2020 in certain limited circumstances. If the Vodafone Agreement terminates because the condition to obtain antitrust approval is not met, Vodafone has agreed to pay us a compensatory payment of €250.0 million ($291.9 million). Pursuant to the Vodafone Agreement, our company will retain all cash generated from the Vodafone Disposal Group through the closing of the transaction.

In connection with the sale of the Vodafone Disposal Group, we have agreed to provide certain transitional services for a period of up to four years. These services principally comprise network and information technology-related functions. The annual charges will depend on the actual level of services required by Vodafone.

UPC Austria

On July 31, 2018, we completed the sale of our Austrian operations, "**UPC Austria**," to a third party for an enterprise value of €1.9 billion ($2.2 billion at the transaction date). After considering debt, working capital and minority interest adjustments, we received net cash proceeds of €1.8 billion ($2.1 billion at the transaction date). A portion of the net proceeds were used to repay or redeem an aggregate $1.5 billion (equivalent based on the applicable June 30, 2018 exchange rates) principal amount of our outstanding debt, including (i) the repayment of $913.8 million (equivalent) principal amount under the UPC Holding Bank Facility, (ii) the redemption of $70.1 million (equivalent) principal amount of the UPCB SPE Notes and (iii) the redemption of $519.9 million (equivalent) principal amount of the VM Notes. The remaining net proceeds from the sale of UPC Austria are expected to be used for general corporate purposes, including an additional $500.0 million of share repurchases, as further described in note 11.

In connection with the sale of UPC Austria, we have agreed to provide certain transitional services for a period of up to four years. These services principally comprise network and information technology-related functions. The annual charges will depend on the actual level of services required by the purchaser. Liberty Global will also allow the use of the UPC brand for a transitional period of up to three years as part of the transaction.

Split-off Transaction

Prior to December 29, 2017, our share capital included (i) Liberty Global Class A, Class B and Class C ordinary shares (collectively, **Liberty Global Shares**) and (ii) LiLAC Class A, Class B and Class C (collectively, **LiLAC Shares**). On December 29, 2017, in order to effect the split-off of the LiLAC Group (the **Split-off Transaction**), we distributed 100% of the common shares (the **Distribution**) of Liberty Latin America Ltd. (**Liberty Latin America**) to the holders of our then outstanding LiLAC Shares. Just prior to the completion of the Split-off Transaction, all of the businesses, assets and liabilities of the LiLAC Group were transferred to Liberty Latin America, which was then a wholly-owned subsidiary of Liberty Global. Following the Distribution, the LiLAC Shares were redesignated as deferred shares (which had virtually no economic rights) and Liberty Latin America became an independent publicly-traded company that is no longer consolidated by Liberty Global. No gain or loss was recognized in connection with the Split-off Transaction.

In connection with the Split-off Transaction, we entered into several agreements that govern certain transactions and other matters between our company and Liberty Latin America (the **Split-off Agreements**). During the six months ended June 30, 2018, the impacts of the Split-off Agreements and other normal recurring transactions between our company and Liberty Latin America were not material.

Presentation of Discontinued Operations

Effective with the signing of the Vodafone Agreement, we began presenting the Vodafone Disposal Group as discontinued operations and, accordingly, we no longer depreciate or amortize the long-lived assets of such group. From December 22, 2017, the date we reached an agreement to sell UPC Austria, through the signing of the Vodafone Agreement, we accounted for UPC Austria as held for sale but did not present such entity as a discontinued operation as this disposal was not considered to be a

strategic shift that would have a major effect on our operations and financial results. We ceased to depreciate or amortize the long-lived assets of UPC Austria on December 22, 2017. Effective with the signing of the Vodafone Agreement and in consideration of the additional disposals contemplated therein, we began presenting UPC Austria as a discontinued operation. Accordingly, UPC Austria and the Vodafone Disposal Group are presented as discontinued operations in our condensed consolidated balance sheets, statements of operations and cash flows for all periods presented. Our operations in Romania, Hungary and the Czech Republic are held through UPC Holding, as was UPC Austria prior to its sale on July 31, 2018. No debt, interest or derivative instruments of the UPC Holding borrowing group, other than amounts that are direct obligations of the entities to be disposed, has been allocated to discontinued operations. Conversely, all of Unitymedia's debt, interest and derivative instruments are included in discontinued operations as they are direct obligations of entities within the Vodafone Disposal Group. As discussed above, a portion of the proceeds from the disposition of UPC Austria was used to pay down the debt of the UPC Holding borrowing group. In addition, we expect that a portion of the proceeds from the disposition of the Vodafone Disposal Group will be used to pay down the debt of the UPC Holding borrowing group.

In addition, the entities comprising the LiLAC Group are reflected as discontinued operations in our condensed consolidated statements of operations and cash flows for the three and six months ended June 30, 2017.

The carrying amounts of the major classes of assets and liabilities of UPC Austria and the Vodafone Disposal Group as of June 30, 2018 are summarized below:

	UPC Austria	Vodafone Disposal Group	Total
		in millions	
Assets:			
Current assets other than cash	$ 40.9	$ 384.3	$ 425.2
Property and equipment, net	479.6	5,245.8	5,725.4
Goodwill	706.0	4,041.0	4,747.0
Other assets, net	3.2	458.2	461.4
Total assets	$ 1,229.7	$ 10,129.3	$ 11,359.0
Liabilities:			
Current portion of debt and capital lease obligations	$ 0.8	$ 602.3	$ 603.1
Other accrued and current liabilities	82.8	1,187.2	1,270.0
Long-term debt and capital lease obligations	1.3	9,155.7	9,157.0
Other long-term liabilities	85.1	883.3	968.4
Total liabilities	$ 170.0	$ 11,828.5	$ 11,998.5

The carrying amounts of the major classes of assets and liabilities of UPC Austria and the Vodafone Disposal Group as of December 31, 2017 are summarized below:

	UPC Austria	Vodafone Disposal Group	Total
		in millions	
Assets:			
Current assets other than cash	$ 29.2	$ 238.9	$ 268.1
Property and equipment, net	451.9	5,290.1	5,742.0
Goodwill	732.2	4,181.0	4,913.2
Other assets, net	3.2	482.7	485.9
Total assets	$ 1,216.5	$ 10,192.7	$ 11,409.2
Liabilities:			
Current portion of debt and capital lease obligations	$ 0.8	$ 486.9	$ 487.7
Other accrued and current liabilities	77.7	1,022.3	1,100.0
Long-term debt and capital lease obligations	1.5	9,026.1	9,027.6
Other long-term liabilities	76.3	863.7	940.0
Total liabilities	$ 156.3	$ 11,399.0	$ 11,555.3

The operating results of UPC Austria, the Vodafone Disposal Group and the LiLAC Group for the three and six months ended June 30, 2018 and 2017 are summarized in the following tables. These amounts exclude intercompany revenue and expenses that are eliminated within our condensed consolidated statement of operations.

	UPC Austria	Vodafone Disposal Group	Total
		in millions	
Three months ended June 30, 2018			
Revenue	$ 107.4	$ 892.9	$ 1,000.3
Operating income	$ 61.7	$ 419.9	$ 481.6
Earnings before income taxes and noncontrolling interests	$ 61.5	$ 310.1	$ 371.6
Income tax expense	(9.7)	(80.1)	(89.8)
Net earnings	51.8	230.0	281.8
Net earnings attributable to noncontrolling interests	(1.8)	—	(1.8)
Net earnings attributable to Liberty Global shareholders	$ 50.0	$ 230.0	$ 280.0

	UPC Austria	Vodafone Disposal Group	Total
		in millions	
Six months ended June 30, 2018			
Revenue	$ 216.7	$ 1,845.2	$ 2,061.9
Operating income	$ 122.9	$ 731.5	$ 854.4
Earnings before income taxes and noncontrolling interests	$ 122.7	$ 491.5	$ 614.2
Income tax expense	(19.2)	(126.8)	(146.0)
Net earnings	103.5	364.7	468.2
Net earnings attributable to noncontrolling interests	(3.6)	—	(3.6)
Net earnings attributable to Liberty Global shareholders	$ 99.9	$ 364.7	$ 464.6

	UPC Austria	Vodafone Disposal Group	LiLAC Group	Total
		in millions		
Three months ended June 30, 2017				
Revenue	$ 95.9	$ 792.9	$ 920.9	$ 1,809.7
Operating income	$ 35.6	$ 234.5	$ 155.4	$ 425.5
Earnings before income taxes and noncontrolling interests	$ 35.6	$ 125.9	$ 8.4	$ 169.9
Income tax expense	(3.0)	(27.4)	(30.6)	(61.0)
Net earnings (loss)	32.6	98.5	(22.2)	108.9
Net earnings attributable to noncontrolling interests	(1.6)	—	(15.5)	(17.1)
Net earnings (loss) attributable to Liberty Global shareholders	$ 31.0	$ 98.5	$ (37.7)	$ 91.8

	UPC Austria	Vodafone Disposal Group	LiLAC Group	Total
		in millions		
Six months ended June 30 2017				
Revenue	$ 188.1	$ 1,549.9	$ 1,831.8	$ 3,569.8
Operating income	$ 70.1	$ 410.0	$ 290.2	$ 770.3
Earnings before income taxes and noncontrolling interests	$ 70.1	$ 221.1	$ 42.1	$ 333.3
Income tax expense	(5.8)	(45.1)	(75.2)	(126.1)
Net earnings (loss)	64.3	176.0	(33.1)	207.2
Net earnings attributable to noncontrolling interests	(3.2)	—	(31.9)	(35.1)
Net earnings (loss) attributable to Liberty Global shareholders	$ 61.1	$ 176.0	$ (65.0)	$ 172.1

Our basic and diluted earnings from discontinued operations attributable to Liberty Global shareholders per Liberty Global Share for the three and six months ended June 30, 2018 and 2017 is presented below. These amounts relate to the operations of UPC Austria and the Vodafone Disposal Group. For information regarding the calculation of our weighted average shares outstanding with respect to Liberty Global Shares, see note 14.

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
Basic earnings from discontinued operations attributable to Liberty Global shareholders per Liberty Global Share	$ 0.35	$ 0.15	$ 0.58	$ 0.27
Diluted earnings from discontinued operations attributable to Liberty Global shareholders per Liberty Global Share	$ 0.35	$ 0.15	$ 0.58	$ 0.27

Our basic and diluted loss from discontinued operations attributable to Liberty Global shareholders per LiLAC Share for the three and six months ended June 30, 2017 is presented below. These amounts relate to the operations of the LiLAC Group.

	Three months ended June 30, 2017	Six months ended June 30, 2017
Basic and diluted loss from discontinued operations attributable to Liberty Global shareholders per LiLAC Share	$ (0.22)	$ (0.38)
Weighted average ordinary shares outstanding (LiLAC Shares) - basic and diluted	172,074,934	172,410,613

Other

Multimedia. On October 18, 2016, our subsidiary UPC Polska SP Z.o.o. (**UPC Poland**) entered into a definitive agreement to acquire the cable business of Multimedia Polska S.A. (**Multimedia**), the third-largest cable operator in Poland. On October 18, 2017, the Polish regulator issued a statement of objection against the proposed transaction on the basis that such transaction could restrict competition in a number of cities across the country. On March 23, 2018, UPC Poland withdrew its application for regulatory clearance to acquire Multimedia after failing to agree to revised commercial terms with the sellers that take into account current regulatory and market conditions. In addition, the agreement to acquire Multimedia has been terminated.

(5) Investments

The details of our investments are set forth below:

Accounting Method	June 30, 2018	December 31, 2017
	in millions	
Equity (a):		
VodafoneZiggo JV (b)	$ 3,993.0	$ 4,162.8
Other	160.7	161.8
Total — equity	4,153.7	4,324.6
Fair value:		
ITV plc (**ITV**) — subject to re-use rights	914.9	892.0
Sumitomo Corporation (**Sumitomo**)	600.0	776.5
ITI Neovision S.A.	163.8	161.9
Lions Gate Entertainment Corp (**Lionsgate**)	120.7	163.9
Casa Systems, Inc. (**Casa**)	72.4	76.3
Other	292.3	244.7
Total — fair value	2,164.1	2,315.3
Cost (c)	—	31.5
Total	$ 6,317.8	$ 6,671.4

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(a) At June 30, 2018 and December 31, 2017, the carrying amounts of each of our equity method investments did not materially exceed our proportionate share of the respective investee’s net assets.

(b) Amounts include a related-party euro-denominated note receivable (the **VodafoneZiggo JV Receivable**) with a principal amount of $1,050.9 million and $1,081.9 million, respectively, due from a subsidiary of the VodafoneZiggo JV (as defined below) to a subsidiary of Liberty Global. The VodafoneZiggo JV Receivable bears interest at 5.55% and requires €100.0 million ($116.8 million) of principal to be paid annually through December 31, 2019, with the remaining principal due on January 16, 2027. The accrued interest on the VodafoneZiggo JV Receivable will be payable in a manner mutually agreed upon by Liberty Global and the VodafoneZiggo JV. During the six months ended June 30, 2018, interest accrued on the VodafoneZiggo JV Receivable was $30.2 million, all of which has been cash settled.

(c) As a result of the January 1, 2018 adoption of ASU 2016-01, all of our cost investments have been reclassified to fair value investments.

For information regarding the impact of the adoption of ASU 2014-09 on our accumulated deficit and our investment in the VodafoneZiggo JV, see note 2.

Equity Method Investments

The following table sets forth the details of our share of losses of affiliates, net:

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in millions			
VodafoneZiggo JV (a)	$ (63.2)	$ 6.5	$ (90.0)	$ 5.2
Other	(19.1)	(10.1)	(28.8)	(24.5)
Total	$ (82.3)	$ (3.6)	$ (118.8)	$ (19.3)

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(a) Amounts include the net effect of (i) 100% of the interest income earned on the VodafoneZiggo JV Receivable, (ii) 100% of the share-based compensation expense associated with Liberty Global awards held by VodafoneZiggo JV employees who were formerly employees of Liberty Global, as these awards remain our responsibility, and (iii) our 50% share of the remaining results of operations of the VodafoneZiggo JV.

VodafoneZiggo JV. On December 31, 2016, one of our wholly-owned subsidiaries contributed VodafoneZiggo Holding B.V. and its subsidiaries (**VodafoneZiggo Holding**) to VodafoneZiggo Group Holding B.V., an entity that was formed as a 50:50 joint venture (the **VodafoneZiggo JV**) between Vodafone and Liberty Global (the **VodafoneZiggo JV Transaction**).

On January 4, 2017, in connection with the completion of the VodafoneZiggo JV Transaction, we received cash of €2.2 billion ($2.4 billion at the transaction date) comprising (i) a distribution reflecting 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 VodafoneZiggo Holding during the third quarter of 2016 and (ii) an equalization payment from Vodafone of €802.9 million ($840.8 million at the transaction date) that was subject to post-closing adjustments. During the second quarter of 2017, the equalization amount was finalized, resulting in the receipt of an additional €3.9 million ($4.5 million at the transaction date) from Vodafone.

During the first quarter of 2017, we paid $162.6 million of VAT on behalf of the VodafoneZiggo JV associated with the termination of a services agreement with Ziggo Group Holding B.V. that was in effect prior to the closing of the VodafoneZiggo JV Transaction. This advance was repaid during the first quarter of 2017. In addition, during the second quarters of 2018 and 2017, we received dividend distributions from the VodafoneZiggo JV of $116.6 million and $87.3 million, respectively, which were accounted for as returns on capital for purposes of our condensed consolidated statements of cash flows.

Pursuant to an agreement entered into in connection with the formation of the VodafoneZiggo JV (the **Framework Agreement**), Liberty Global provides certain services to the VodafoneZiggo JV on a transitional or ongoing basis (collectively, the **JV Services**). The JV Services provided by Liberty Global 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 VodafoneZiggo JV. Liberty Global charges both fixed and usage-based fees to the VodafoneZiggo JV for the JV Services provided during the term of the Framework Agreement. We recorded revenue from the VodafoneZiggo JV of $53.8 million and $31.8 million during the three months ended June 30, 2018 and 2017, respectively, and $88.3 million and $63.3 million during the six months ended June 30, 2018 and 2017, respectively. These amounts include revenue from (a) the JV Services and (b) during the 2018 periods, sales of customer premises equipment at a mark-up. During the six months ended June 30, 2018 and 2017, we transferred certain assets to the VodafoneZiggo JV that we purchased on its behalf with an aggregate cost of $30.3 million and $107.8 million, respectively. At June 30, 2018 and December 31, 2017, $46.8 million and $33.3 million, respectively, were due from the VodafoneZiggo JV, primarily related to the aforementioned transactions. Amounts due from the VodafoneZiggo JV, which are periodically cash settled, are included in other current assets in our condensed consolidated balance sheet.

The VodafoneZiggo JV is experiencing significant competition. In particular, the mobile operations of the VodafoneZiggo JV continue to experience competitive pressure on pricing, characterized by aggressive promotion campaigns, heavy marketing efforts and increasing or unlimited data bundles. In light of this competition, as well as regulatory and economic factors, we could conclude in future periods that our investment in the VodafoneZiggo JV is impaired or management of the VodafoneZiggo JV could conclude that an impairment of the VodafoneZiggo JV goodwill and, to a lesser extent, long-lived assets, is required. Any such impairment of the VodafoneZiggo JV's goodwill or our investment in the VodafoneZiggo JV would be reflected as a component of share of results of affiliates, net, in our condensed consolidated statement of operations. Our share of any such impairment charges could be significant.

The summarized results of operations of the VodafoneZiggo JV are set forth below:

	Three months ended June 30,		Six months ended June 30,	
	2018	**2017**	**2018**	**2017**
	in millions			
Revenue	$ 1,114.5	$ 1,081.3	$ 2,296.1	$ 2,165.2
Loss before income taxes	$ (201.2)	$ (25.8)	$ (319.8)	$ (69.1)
Net loss	$ (150.8)	$ (18.3)	$ (238.1)	$ (48.6)

(6) 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 primarily with respect to the U.S. dollar (**$**), the euro (**€**), the British pound sterling (**£**), the Swiss franc (**CHF**), the Czech koruna (**CZK**), the Hungarian forint (**HUF**), the Polish zloty (**PLN**) and the Romanian lei (**RON**). With the exception of a limited number of our foreign currency forward contracts, we do not apply hedge accounting to our derivative instruments. Accordingly, changes in the fair values of most of our derivative instruments are recorded in realized and unrealized gains or losses on derivative instruments, net, in our condensed consolidated statements of operations.

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

	June 30, 2018			December 31, 2017		
	Current (a)	Long-term (a)	Total	Current (a)	Long-term (a)	Total
	in millions					
Assets:						
Cross-currency and interest rate derivative contracts (b)	$ 371.6	$ 1,344.1	$ 1,715.7	$ 477.0	$ 1,071.9	$ 1,548.9
Equity-related derivative instruments (c)	—	491.9	491.9	—	560.9	560.9
Foreign currency forward and option contracts	13.6	—	13.6	17.0	0.1	17.1
Other	0.1	—	0.1	0.4	0.4	0.8
Total	$ 385.3	$ 1,836.0	$ 2,221.3	$ 494.4	$ 1,633.3	$ 2,127.7
Liabilities:						
Cross-currency and interest rate derivative contracts (b)	$ 386.5	$ 1,254.1	$ 1,640.6	$ 210.2	$ 1,557.7	$ 1,767.9
Equity-related derivative instruments (c)	1.7	—	1.7	5.4	—	5.4
Foreign currency forward and option contracts	4.5	—	4.5	7.7	0.2	7.9
Other	—	0.1	0.1	—	—	—
Total	$ 392.7	$ 1,254.2	$ 1,646.9	$ 223.3	$ 1,557.9	$ 1,781.2

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(a) Our current derivative liabilities, long-term derivative assets and long-term derivative liabilities are included in other current and accrued liabilities, other assets, net, and other long-term liabilities, respectively, in our condensed consolidated balance sheets.

(b) We consider credit risk relating to our and our counterparties' nonperformance in the fair value assessment of our derivative instruments. In all cases, the adjustments take into account offsetting liability or asset positions within each of our subsidiary borrowing groups (as defined and described in note 9). The changes in the credit risk valuation adjustments associated with our cross-currency and interest rate derivative contracts resulted in a net gain (loss) of ($65.6 million**)** and $59.6 million during the three months ended June 30, 2018 and 2017, respectively, and a net gain (loss) of ($27.9 million) and $109.0 million during the six months ended June 30, 2018 and 2017, respectively. These amounts are included in realized and unrealized gains (losses) on derivative instruments, net, in our condensed consolidated statements of operations. For further information regarding our fair value measurements, see note 7.

(c) Our equity-related derivative instruments primarily include the fair value of (i) the share collar (the **ITV Collar**) with respect to ITV shares held by our company, (ii) the prepaid forward transaction (the **Lionsgate Forward**) with respect to 1.25 million of our voting and 1.25 million of our non-voting Lionsgate shares and (iii) at December 31, 2017, the share collar (the **Sumitomo Collar**) with respect to a portion of the shares of Sumitomo held by our company. On May 22, 2018, we settled the final tranche of the Sumitomo Collar and related borrowings with a portion of the existing Sumitomo shares held by our company. The aggregate market value of these shares on the transaction date was $159.3 million.The fair values of the ITV 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 realized and unrealized gains (losses) on derivative instruments, net, are as follows:

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in millions			
Cross-currency and interest rate derivative contracts	$ 870.1	$ (502.3)	$ 508.2	$ (659.1)
Equity-related derivative instruments:				
ITV Collar	(183.6)	163.4	(60.0)	110.2
Lionsgate Forward	3.4	(2.5)	12.4	(2.0)
Sumitomo Collar	(23.2)	2.2	(11.8)	(21.3)
Other	1.0	0.4	2.2	(5.4)
Total equity-related derivative instruments	(202.4)	163.5	(57.2)	81.5
Foreign currency forward and option contracts	8.3	(12.9)	13.9	(19.0)
Other	(0.5)	—	(0.7)	0.5
Total	$ 675.5	$ (351.7)	$ 464.2	$ (596.1)

The net cash received or paid related to our derivative instruments is classified as an operating, investing or financing activity in our condensed 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 condensed consolidated statements of cash flows. For derivative contracts that are terminated prior to maturity, the cash paid or received upon termination that relates to future periods is classified as a financing activity. The following table sets forth the classification of the net cash inflows (outflows) of our derivative instruments:

	Six months ended June 30,	
	2018	2017
	in millions	
Operating activities	$ 246.1	$ 89.5
Investing activities	—	(0.5)
Financing activities	10.2	(139.0)
Total	$ 256.3	$ (50.0)

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 June 30, 2018, our exposure to counterparty credit risk included derivative assets with an aggregate fair value of $456.1 million.

Details of our Derivative Instruments

Cross-currency Derivative Contracts

As noted above, we are exposed to foreign currency exchange rate risk in situations where our debt is denominated in a currency other than the functional currency of the operations whose cash flows support our ability to repay or refinance such debt. Although we generally seek to match the denomination of our subsidiaries' borrowings with the functional currency of the operations that are supporting the respective borrowings, market conditions or other factors may cause us to enter into borrowing arrangements that are not denominated in the functional currency of the underlying operations (unmatched debt). Our policy is generally to provide for an economic hedge against foreign currency exchange rate movements by using derivative instruments to synthetically convert unmatched debt into the applicable underlying currency. At June 30, 2018, substantially all of our debt was either directly or synthetically matched to the applicable functional currencies of the underlying operations. The following table sets forth the total notional amounts and the related weighted average remaining contractual lives of our cross-currency swap contracts at June 30, 2018:

Borrowing group		Notional amount due from counterparty		Notional amount due to counterparty		Weighted average remaining life
		in millions				in years
Virgin Media	$	400.0	€	339.6		4.6
	$	8,933.0	£	5,844.3	(a) (b)	5.2
	£	2,396.1	$	3,450.0	(a)	6.5
UPC Holding	$	2,765.0	€	2,276.7		6.3
	$	1,200.0	CHF	1,107.5	(b)	6.7
	€	2,521.2	CHF	2,901.0	(b)	5.5
	€	418.5	CZK	11,521.8		2.0
	€	488.0	HUF	138,437.5		3.5
	€	851.6	PLN	3,604.5		3.2
	€	225.9	RON	650.0		3.6
Telenet	$	3,195.0	€	2,834.1	(b)	6.9
	€	1,431.2	$	1,600.0	(a)	7.0

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(a) Includes certain derivative instruments that 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 coupon-related payments and receipts. At June 30, 2018, the total U.S. dollar equivalents of the notional amount of these derivative instruments was $5.3 billion.

(b) Includes certain derivative instruments that are "forward-starting," such that the initial exchange occurs at a date subsequent to June 30, 2018. These instruments are typically entered into in order to extend existing hedges without the need to amend existing contracts.

Interest Rate Swap Contracts

As noted above, we enter into interest rate swaps to protect against increases in the interest rates on our variable-rate debt. The following table sets forth the total U.S. dollar equivalents of the notional amounts and the related weighted average remaining contractual lives of our interest rate swap contracts at June 30, 2018:

	Borrowing group pays fixed rate (a)		Borrowing group receives fixed rate	
Borrowing group	**Notional amount**	**Weighted average remaining life**	**Notional amount**	**Weighted average remaining life**
	in millions	**in years**	**in millions**	**in years**
Virgin Media	$ 18,625.7	3.6	$ 11,789.1	5.7
UPC Holding	$ 5,766.6	5.1	$ 3,408.3	7.3
Telenet	$ 3,686.4	5.5	$ 1,666.3	5.2

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(a) Includes forward-starting derivative instruments.

Interest Rate Swap Options

We have entered into various interest rate swap options (**swaptions**), which give us the right, but not the obligation, to enter into certain interest rate swap contracts at set dates in the future, with each such contract having a life of no more than three years. At the transaction date, the strike rate of each of these contracts was above the corresponding market rate. The following table sets forth certain information regarding our swaptions at June 30, 2018:

Borrowing group	**Notional amount**	**Underlying swap currency**	**Weighted average option expiration period (a)**	**Weighted average strike rate (b)**
	in millions		**in years**	
Virgin Media	$ 6,275.6	£	1.4	2.47%
	$ 601.1	€	1.4	2.08%
UPC Holding	$ 1,328.3	CHF	0.6	1.22%

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(a) Represents the weighted average period until the date on which we have the option to enter into the interest rate swap contracts.

(b) Represents the weighted average interest rate that we would pay if we exercised our option to enter into the interest rate swap contracts.

Basis Swaps

Our basis swaps involve the exchange of attributes used to calculate our floating interest rates, including (i) the benchmark rate, (ii) the underlying currency and/or (iii) the borrowing period. We typically enter into these swaps to optimize our interest rate profile based on our current evaluations of yield curves, our risk management policies and other factors. The following table sets forth the total U.S. dollar equivalents of the notional amounts and related weighted average remaining contractual lives of our basis swap contracts at June 30, 2018:

Borrowing group	Notional amount due from counterparty	Weighted average remaining life
	in millions	in years
Virgin Media	$ 4,587.5	0.5
UPC Holding	$ 1,975.0	0.5
Telenet	$ 1,600.0	0.5

Interest Rate Caps and Collars

We enter into interest rate cap and collar agreements that lock in a maximum interest rate if variable rates rise, but also allow our company to benefit, to a limited extent in the case of collars, from declines in market rates. At June 30, 2018, the total U.S. dollar equivalents of the notional amounts of our interest rate caps and collars were $164.9 million and $662.7 million, respectively.

Impact of Derivative Instruments on Borrowing Costs

The impact of the derivative instruments that mitigate our foreign currency and interest rate risk, as described above, on our borrowing costs is as follows:

Borrowing group	Decrease to borrowing costs at June 30, 2018 (a)
Virgin Media	(0.32)%
UPC Holding	(0.02)%
Telenet	(0.44)%
Total decrease to borrowing costs	(0.27)%

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(a) Represents the effect of derivative instruments in effect at June 30, 2018 and does not include forward-starting derivative instruments or swaptions.

Foreign Currency Forwards and Options

Certain of our subsidiaries enter into foreign currency forward and option contracts with respect to non-functional currency exposure. As of June 30, 2018, the total U.S. dollar equivalents of the notional amount of foreign currency forward and option contracts was $482.4 million.

(7) <u>Fair Value Measurements</u>

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 borrowed shares of Sumitomo pursuant to a securities lending arrangement (the **Sumitomo Share Loan**). The reported fair values of these investments and instruments as of June 30, 2018 likely will not represent the value that will be paid or received upon the ultimate settlement or disposition of these assets and liabilities.

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.

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 credit risk valuation adjustments with respect to our cross-currency and interest rate swaps are quantified and further explained in note 6.

Fair value measurements are also used in connection with nonrecurring valuations performed in connection with acquisition accounting and impairment assessments. The nonrecurring valuations associated with acquisition accounting primarily include the valuation of reporting units, customer relationship and other intangible assets and property and equipment. Unless a reporting unit has a readily determinable fair value, the valuation of reporting units is based at least in part on discounted cash flow analyses. With the exception of certain inputs for our weighted average cost of capital and discount rate calculations that are derived from pricing services, the inputs used in our discounted cash flow analyses, such as forecasts of future cash flows, are based on our assumptions. The valuation of customer relationships is primarily based on an excess earnings methodology, which is a form of a discounted cash flow analysis. The excess earnings methodology requires us to estimate the specific cash flows expected from the customer relationship, considering such factors as estimated customer life, the revenue expected to be generated over the life of the customer 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. Most of our nonrecurring valuations use significant unobservable inputs and therefore fall under Level 3 of the fair value hierarchy. During the six months ended June 30, 2018 and 2017, we did not perform significant nonrecurring fair value measurements.

For additional information concerning our fair value measurements, see note 8 to the consolidated financial statements included in our 10-K.

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

		Fair value measurements at June 30, 2018 using:		
Description	**June 30, 2018**	**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	$ 1,715.7	$ —	$ 1,715.0	$ 0.7
Equity-related derivative instruments	491.9	—	—	491.9
Foreign currency forward and option contracts	13.6	—	13.6	—
Other	0.1	—	0.1	—
Total derivative instruments	2,221.3	—	1,728.7	492.6
Investments	2,164.1	1,717.1	—	447.0
Total assets	$ 4,385.4	$ 1,717.1	$ 1,728.7	$ 939.6
Liabilities:				
Derivative instruments:				
Cross-currency and interest rate derivative contracts	$ 1,640.6	$ —	$ 1,632.6	$ 8.0
Equity-related derivative instruments	1.7	—	—	1.7
Foreign currency forward and option contracts	4.5	—	4.5	—
Other	0.1	—	0.1	—
Total derivative instruments	1,646.9	—	1,637.2	9.7
Debt	881.7	600.6	281.1	—
Total liabilities	$ 2,528.6	$ 600.6	$ 1,918.3	$ 9.7

Description	December 31, 2017	Fair value measurements at December 31, 2017 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	$ 1,548.9	$ —	$ 1,548.7	$ 0.2
Equity-related derivative instruments	560.9	—	—	560.9
Foreign currency forward and option contracts	17.1	—	17.1	—
Other	0.8	—	0.8	—
Total derivative instruments	2,127.7	—	1,566.6	561.1
Investments	2,315.3	1,908.7	—	406.6
Total assets	$ 4,443.0	$ 1,908.7	$ 1,566.6	$ 967.7
Liabilities:				
Derivative instruments:				
Cross-currency and interest rate derivative contracts	$ 1,767.9	$ —	$ 1,764.5	$ 3.4
Equity-related derivative instruments	5.4	—	—	5.4
Foreign currency forward and option contracts	7.9	—	7.9	—
Total derivative instruments	1,781.2	—	1,772.4	8.8
Debt	926.6	621.7	304.9	—
Total liabilities	$ 2,707.8	$ 621.7	$ 2,077.3	$ 8.8

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 (liabilities) at January 1, 2018	$ 406.6	$ (3.2)	$ 555.5	$ 958.9
Gains (losses) included in earnings (loss) from continuing operations (a):				
Realized and unrealized losses on derivative instruments, net	—	(4.5)	(57.2)	(61.7)
Realized and unrealized gains due to changes in fair values of certain investments and debt, net	4.4	—	—	4.4
Impact of ASU 2016-01	31.9	—	—	31.9
Additions	25.1	0.2	—	25.3
Dispositions	(12.1)	—	—	(12.1)
Final settlement of Sumitomo Collar (b)	—	—	(7.4)	(7.4)
Transfers out of Level 3	(2.0)	—	—	(2.0)
Foreign currency translation adjustments, dividends and other, net	(6.9)	0.2	(0.7)	(7.4)
Balance of net assets (liabilities) at June 30, 2018	$ 447.0	$ (7.3)	$ 490.2	$ 929.9

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(a) Most of these net gains and losses relate to assets and liabilities that we continue to carry on our condensed consolidated balance sheet as of June 30, 2018.

(b) For information regarding the settlement of the final tranche of the Sumitomo Collar, see note 6.

(8) Long-lived Assets

Property and Equipment, Net

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

	June 30, 2018	December 31, 2017
	in millions	
Distribution systems	$ 17,714.5	$ 17,522.9
Customer premises equipment	4,633.9	4,434.3
Support equipment, buildings and land	5,044.8	4,790.2
Total property and equipment, gross	27,393.2	26,747.4
Accumulated depreciation	(13,340.2)	(12,502.1)
Total property and equipment, net	$ 14,053.0	$ 14,245.3

During the six months ended June 30, 2018 and 2017, we recorded non-cash increases to our property and equipment related to vendor financing arrangements of $1,187.9 million and $1,164.1 million, respectively, which exclude related VAT of $186.1 million and $184.1 million, respectively, that was also financed by our vendors under these arrangements. In addition, during the

six months ended June 30, 2018 and 2017, we recorded non-cash increases to our property and equipment related to assets acquired under capital leases of $46.5 million and $97.9 million, respectively.

Goodwill

Changes in the carrying amount of our goodwill during the six months ended June 30, 2018 are set forth below:

	January 1, 2018	Acquisitions and related adjustments	Foreign currency translation adjustments	June 30, 2018
	in millions			
U.K./Ireland	$ 8,134.1	$ —	$ (199.7)	$ 7,934.4
Belgium	2,681.7	20.1	(79.6)	2,622.2
Switzerland	2,931.3	—	(54.2)	2,877.1
Central and Eastern Europe	607.0	—	(41.5)	565.5
Total	$ 14,354.1	$ 20.1	$ (375.0)	$ 13,999.2

If among other factors, (i) our equity values were to decline 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.

Intangible Assets Subject to Amortization, Net

The details of our intangible assets subject to amortization, which are included in other assets, net, in our condensed consolidated balance sheets, are set forth below:

	June 30, 2018			December 31, 2017		
	Gross carrying amount	Accumulated amortization	Net carrying amount	Gross carrying amount	Accumulated amortization	Net carrying amount
	in millions					
Customer relationships	$ 4,013.3	$ (2,958.7)	$ 1,054.6	$ 4,041.0	$ (2,745.8)	$ 1,295.2
Other	516.9	(241.0)	275.9	531.9	(218.6)	313.3
Total	$ 4,530.2	$ (3,199.7)	$ 1,330.5	$ 4,572.9	$ (2,964.4)	$ 1,608.5

(9) Debt and Capital Lease Obligations

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

	June 30, 2018						
	Weighted average interest rate (a)	Unused borrowing capacity (b)		Estimated fair value (c)		Principal amount	
		Borrowing currency	U.S. $ equivalent	June 30, 2018	December 31, 2017	June 30, 2018	December 31, 2017
				in millions			
VM Notes (d)	5.54%	—	$ —	$ 9,406.6	$ 9,987.4	$ 9,434.0	$ 9,565.7
VM Credit Facilities	4.57%	(e)	890.6	5,482.2	4,681.5	5,511.0	4,676.2
UPC Holding Bank Facility (d)	4.16%	990.1	1,156.1	2,535.9	2,576.4	2,558.9	2,576.1
UPCB SPE Notes	4.51%	—	—	2,474.3	2,638.8	2,541.2	2,582.6
UPC Holding Senior Notes (d)	4.57%	—	—	1,183.5	1,272.5	1,291.5	1,313.4
Telenet Credit Facility	3.97%	(f)	519.7	2,436.7	2,188.9	2,452.4	2,177.6
Telenet Senior Secured Notes	4.68%	—	—	1,586.1	1,724.4	1,700.6	1,721.3
Telenet SPE Notes	4.88%	—	—	591.4	1,014.4	557.0	937.7
Vendor financing (g)	3.69%	—	—	2,495.5	3,599.0	2,495.5	3,599.0
ITV Collar Loan	0.71%	—	—	1,404.8	1,445.8	1,428.1	1,463.8
Sumitomo Share Loan (h)	0.95%	—	—	600.6	621.7	600.6	621.7
Derivative-related debt instruments (i)	3.41%	—	—	334.7	359.8	336.4	361.5
Sumitomo Collar Loan	—	—	—	—	170.3	—	169.1
Other (j)	5.92%	—	—	384.3	413.4	389.1	418.2
Total debt before deferred financing costs, discounts and premiums	4.48%		$ 2,566.4	$ 30,916.6	$ 32,694.3	$ 31,296.3	$ 32,183.9

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

	June 30, 2018	December 31, 2017
	in millions	
Total debt before deferred financing costs, discounts and premiums	$ 31,296.3	$ 32,183.9
Deferred financing costs, discounts and premiums, net	(150.6)	(171.8)
Total carrying amount of debt	31,145.7	32,012.1
Capital lease obligations (k)	672.8	691.4
Total debt and capital lease obligations	31,818.5	32,703.5
Current maturities of debt and capital lease obligations	(3,392.6)	(3,680.1)
Long-term debt and capital lease obligations	$ 28,425.9	$ 29,023.4

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(a) Represents the weighted average interest rate in effect at June 30, 2018 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 deferred financing costs, our weighted average interest rate on our aggregate

variable- and fixed-rate indebtedness was 3.98% at June 30, 2018. For information regarding our derivative instruments, see note 6.

(b) Unused borrowing capacity represents the maximum availability under the applicable facility at June 30, 2018 without regard to covenant compliance calculations or other conditions precedent to borrowing. At June 30, 2018, based on the most restrictive applicable leverage covenants, the full amount of unused borrowing capacity was available to be borrowed under each of the respective subsidiary facilities, and based on the most restrictive applicable leverage-based restricted payment tests, 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 we present, based on the most restrictive applicable leverage covenants, leverage-based restricted payment tests and other limitations in effect for each borrowing group, (i) for each subsidiary where the ability to borrow is limited, 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 do not consider any actual or potential changes to our borrowing levels subsequent to June 30, 2018 and are based on the most restrictive applicable leverage-based restricted payment tests and covenant and other limitations in effect for each borrowing group at June 30, 2018, both before and after considering the impact of the completion of the June 30, 2018 compliance requirements.

	Limitation on availability			
	June 30, 2018		Upon completion of relevant June 30, 2018 compliance reporting requirements	
	Borrowing currency	U.S. $ equivalent	Borrowing currency	U.S. $ equivalent
	in millions			
Limitation on availability to be borrowed under:				
VM Credit Facilities (e)	£ 675.0	$ 890.6	£ 455.4	$ 600.9

(c) The estimated fair values of our debt instruments are generally 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 7.

(d) As further described in note 4, subsequent to June 30, 2018, we used a portion of the net proceeds from the sale of UPC Austria to repay or redeem certain debt of the UPC Holding and Virgin Media borrowing groups.

(e) Unused borrowing capacity under the VM Credit Facilities relates to multi-currency revolving facilities with an aggregate maximum borrowing capacity equivalent to £675.0 million ($890.6 million). In February 2018, the VM Revolving Facility was amended and split into two revolving facilities. VM Revolving Facility A is a multi-currency revolving facility maturing on December 31, 2021 with a maximum borrowing capacity equivalent to £75.0 million ($98.9 million), and VM Revolving Facility B is a multi-currency revolving facility maturing on January 15, 2024 with a maximum borrowing capacity equivalent to £600.0 million ($791.7 million). All other terms from the previously existing VM Revolving Facility continue to apply to the new revolving facilities

(f) Unused borrowing capacity under the Telenet Credit Facility comprises (i) €400.0 million ($467.1 million) under Telenet Facility AG, (ii) €25.0 million ($29.2 million) under the Telenet Overdraft Facility and (iii) €20.0 million ($23.4 million) under the Telenet Revolving Facility, each of which were undrawn at June 30, 2018.

(g) Represents amounts owed pursuant to interest-bearing vendor financing arrangements that are used to finance certain of our property and equipment additions and, to a lesser extent, certain of our operating expenses. These obligations are generally due within one year 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 condensed consolidated statements of cash flows.

(h) The Sumitomo Share Loan is carried at fair value. For information regarding fair value hierarchies, see note 7.

(i) Represents amounts associated with certain derivative-related borrowing instruments, including $281.1 million and $304.9 million at June 30, 2018 and December 31, 2017, respectively, carried at fair value. These instruments mature at various dates through January 2025. For information regarding fair value hierarchies, see note 7.

(j) Amounts include $131.0 million and $160.9 million at June 30, 2018 and December 31, 2017, respectively, of debt collateralized by certain trade receivables of Virgin Media.

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

	June 30, 2018	December 31, 2017
	in millions	
Telenet	$ 461.6	$ 456.1
UPC Holding	80.6	89.0
Virgin Media	73.5	79.1
Other subsidiaries	57.1	67.2
Total	$ 672.8	$ 691.4

Refinancing Transactions - General Information

At June 30, 2018, most of our outstanding debt had been incurred by one of our three subsidiary “borrowing groups.” References to these borrowing groups, which comprise Virgin Media, UPC Holding and Telenet, include their respective restricted parent and subsidiary entities. Below we provide summary descriptions of any financing transactions completed during the first six months of 2018. Unless otherwise noted, the terms and conditions of any new notes and/or credit facilities are largely consistent with those of existing notes and credit facilities of the corresponding borrowing group with regard to covenants, events of default and change of control provisions, among other items. For information regarding the general terms and conditions of our debt and capitalized terms not defined herein, see note 10 to the consolidated financial statements included in our 10-K.

Virgin Media Financing Transaction

In April 2018, Virgin Media Receivables Financing Notes II Designated Activity Company (**Virgin Media Receivables II Financing Company**), a third-party special purpose financing entity that is not consolidated by Virgin Media or Liberty Global, issued £300.0 million ($395.8 million) principal amount of 5.75% receivables financing notes due April 15, 2023. In June 2018, Virgin Media Receivables II Financing Company issued an additional £50.0 million ($66.0 million) principal amount of 5.75% receivables financing notes due April 15, 2023. These notes, together with the initial £300.0 million, are collectively referred to as the “**VM Receivables Financing II Notes**.” The VM Receivables Financing II Notes are not the obligations of Virgin Media or Liberty Global. The net proceeds from the VM Receivables Financing II 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 II 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 II**) under a new credit facility of Virgin Media. The VM Financing Facility II, together with the VM Financing Facility, which was created in connection with the issuance of the VM Receivables Financing Notes by Virgin Media Receivables Financing Company in 2016, are collectively referred to as the “**VM Financing Facilities**.” At June 30, 2018, the principal amount outstanding under the VM Financing Facilities was £700.0 million ($923.6 million). Virgin Media Receivables Financing Company and Virgin Media Receivables II Financing Company can request the VM Financing Facilities be repaid by Virgin Media as additional vendor financed receivables become available for purchase.

Telenet Refinancing Transactions

In March 2018, Telenet used existing cash to prepay 10% of the €530.0 million ($618.9 million) original principal amount under Telenet Facility AB, together with accrued and unpaid interest and the related prepayment premiums, which was owed to

Telenet Finance VI and, in turn, Telenet Finance VI used such proceeds to redeem 10% of the €530.0 million original principal amount of the Telenet Finance VI Notes. In connection with this transaction, Telenet recognized a loss on debt modification and extinguishment, net, of $2.6 million related to (i) the payment of $2.0 million of redemption premiums and (ii) the write-off of $0.6 million of unamortized deferred financing costs and discounts.

In March 2018, commitments under Telenet Facility AL were increased by $300.0 million (the **Telenet Facility AL Add-on**). The terms of the Telenet Facility AL Add-on are consistent with those of Telenet Facility AL. In April 2018, Telenet drew the full $300.0 million of the Telenet Facility AL Add-on and used the net proceeds, together with existing cash, to prepay in full the €250.0 million ($291.9 million) outstanding principal amount under Telenet Facility V, together with accrued and unpaid interest and the related prepayment premiums, which was owed to Telenet Finance V and, in turn, Telenet Finance V used such proceeds to redeem in full the €250.0 million outstanding principal amount of the Telenet Finance V Notes. In connection with this transaction, Telenet recognized a loss on debt modification and extinguishment, net, of $21.3 million related to (i) the payment of $17.3 million of redemption premiums and (ii) the write-off of $4.0 million of unamortized deferred financing costs and discounts.

In May 2018, Telenet entered into (i) a $1,600.0 million term loan facility (**Telenet Facility AN**), which was issued at 99.875% of par, matures on August 15, 2026, bears interest at a rate of LIBOR + 2.25% and is subject to a LIBOR floor of 0.0%, and (ii) a €730.0 million ($852.4 million) term loan facility (**Telenet Facility AO**), which was issued at 99.875% of par, matures on December 15, 2027, bears interest at a rate of EURIBOR + 2.50% and is subject to a EURIBOR floor of 0.0%. The net proceeds from Telenet Facility AN and Telenet Facility AO, together with existing cash, were used to prepay in full (a) the $1,300.0 million outstanding principal amount under Telenet Facility AL, (b) the $300.0 million outstanding principal amount under the Telenet Facility AL Add-on and (c) the €730.0 million outstanding principal amount under Telenet Facility AM. In connection with these transactions, Telenet recognized a loss on debt modification and extinguishment, net, of $7.6 million related to the write-off of of unamortized deferred financing costs and discounts.

Maturities of Debt and Capital Lease Obligations

Maturities of our debt and capital lease obligations as of June 30, 2018 are presented below for the named entity and its subsidiaries, unless otherwise noted. Amounts presented below represent U.S. dollar equivalents based on June 30, 2018 exchange rates:

Debt:

	Virgin Media	UPC Holding (a)	Telenet (b)	Other	Total
			in millions		
Year ending December 31:					
2018 (remainder of year)	$ 1,255.2	$ 281.9	$ 330.2	$ 13.5	$ 1,880.8
2019	1,140.2	230.3	142.0	44.3	1,556.8
2020	80.8	21.5	14.5	207.6	324.4
2021	1,350.0	22.0	12.5	1,584.3	2,968.8
2022	396.0	19.0	12.3	321.2	748.5
2023	957.1	13.8	12.5	—	983.4
Thereafter	11,645.5	6,391.6	4,796.5	—	22,833.6
Total debt maturities	16,824.8	6,980.1	5,320.5	2,170.9	31,296.3
Deferred financing costs, discounts and premiums, net	(54.8)	(50.2)	(21.3)	(24.3)	(150.6)
Total debt	$ 16,770.0	$ 6,929.9	$ 5,299.2	$ 2,146.6	$ 31,145.7
Current portion	$ 2,325.5	$ 508.2	$ 447.4	$ 23.3	$ 3,304.4
Noncurrent portion	$ 14,444.5	$ 6,421.7	$ 4,851.8	$ 2,123.3	$ 27,841.3

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(a) Amounts include certain senior secured notes issued by special purpose financing entities that are consolidated by UPC Holding and Liberty Global.

(b) Amounts include certain senior secured notes issued by special purpose financing entities that are consolidated by Telenet and Liberty Global.

Capital lease obligations:

	Telenet	UPC Holding	Virgin Media	Other	Total
			in millions		
Year ending December 31:					
2018 (remainder of year)	$ 43.1	$ 7.8	$ 8.4	$ 11.2	$ 70.5
2019	76.8	14.9	11.5	16.5	119.7
2020	72.6	15.2	8.5	10.4	106.7
2021	68.4	15.6	8.8	5.1	97.9
2022	68.6	12.7	10.6	3.0	94.9
2023	57.2	11.6	6.3	18.1	93.2
Thereafter	224.9	20.2	192.4	—	437.5
Total principal and interest payments	611.6	98.0	246.5	64.3	1,020.4
Amounts representing interest	(150.0)	(17.4)	(173.0)	(7.2)	(347.6)
Present value of net minimum lease payments	$ 461.6	$ 80.6	$ 73.5	$ 57.1	$ 672.8
Current portion	$ 51.4	$ 10.4	$ 9.7	$ 16.7	$ 88.2
Noncurrent portion	$ 410.2	$ 70.2	$ 63.8	$ 40.4	$ 584.6

Non-cash Refinancing Transactions

During the six months ended June 30, 2018 and June 30, 2017, certain of our refinancing transactions included non-cash borrowings and repayments of debt aggregating $2,453.1 million and $6,546.2 million, respectively.

(10) Income Taxes

Income tax expense attributable to our loss from continuing operations before income taxes differs from the amounts computed using the applicable income tax rate as a result of the following factors:

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in millions			
Computed "expected" tax benefit (expense) (a)	$ (109.4)	$ 133.3	$ 15.0	$ 188.0
Mandatory Repatriation Tax (b)	242.0	—	(968.5)	—
Change in valuation allowances (b) (c):				
Expense	18.9	(102.2)	(16.1)	(169.6)
Benefit	(131.2)	(2.0)	422.1	10.0
Basis and other differences in the treatment of items associated with investments in subsidiaries and affiliates (c):				
Expense	(91.4)	(41.3)	(146.6)	(80.8)
Benefit	(0.4)	(0.1)	3.3	0.3
Non-deductible or non-taxable foreign currency exchange results (c):				
Expense	78.0	(103.4)	(4.9)	(132.5)
Benefit	71.3	3.0	73.6	4.3
Non-deductible or non-taxable interest and other items (c):				
Expense	(15.0)	(5.7)	(41.8)	(52.6)
Benefit	9.3	10.0	22.4	18.8
International rate differences (c) (d):				
Expense	(13.5)	(3.5)	(22.6)	(19.1)
Benefit	15.5	41.4	31.2	75.3
Other, net	18.7	1.8	15.7	7.5
Total income tax benefit (expense)	$ 92.8	$ (68.7)	$ (617.2)	$ (150.4)

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(a) The statutory or "expected" tax rates are U.K. rates of 19.0% for the 2018 periods and 19.25% for the 2017 periods. The statutory rate for the 2017 periods represents the blended rate in effect for the year ended December 31, 2017 based on the 20.0% statutory rate that was in effect for the first quarter of 2017 and the 19.0% statutory rate that was in effect for the remainder of 2017.

(b) As further discussed below, the liability we have recorded for the Mandatory Repatriation Tax (as defined and described below) is significantly lower than the amount included in our income tax expense due primarily to the expected use of carryforward tax attributes in the U.S., all of which were subject to valuation allowances prior to the initial recognition of the Mandatory Repatriation Tax during the first quarter of 2018.

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

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

The Tax Cuts and Jobs Act (the **2017 U.S. Tax Act**) was signed into law on December 22, 2017. In addition to lowering the U.S. corporate tax rate from 35% to 21% effective January 1, 2018, the 2017 U.S. Tax Act contains significant changes to the U.S. income tax regime, including (i) changes to the formation and use of net operating losses incurred after December 31, 2017, (ii)

changes to the income tax deductibility of certain business expenses, including interest expense and compensation paid to certain executive officers, (iii) the imposition of taxes on a one-time deemed mandatory repatriation of earnings and profits of foreign corporations (the **Mandatory Repatriation Tax**) and (iv) a new tax on global intangible low-taxed income.

The Mandatory Repatriation Tax requires that the aggregate post-1986 earnings and profits of our foreign corporations be included in our U.S. taxable income. The one-time repatriation of undistributed foreign earnings and profits is then taxed at a rate of 15.5% for cash earnings and 8% for non-cash earnings, both as defined in the 2017 U.S. Tax Act, and is payable, interest free, over an eight year period according to a prescribed payment schedule with 45% of the tax due in the last two years. At June 30, 2018, we have recorded an estimate of our liability for the Mandatory Repatriation Tax of $289.6 million after considering the expected use of carryforward tax attributes and other filing positions. Our estimate is subject to change during the remaining quarters of 2018 as we continue to refine the complex calculations, review various historical transactions and analyze substantial information that supports our ownership structure and the operating history of our foreign subsidiaries, as well as evaluate recent guidance from the tax authorities on the application of the tax laws underlying the Mandatory Repatriation Tax.

At June 30, 2018, our unrecognized tax benefits of $585.1 million included $425.9 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 the next 12 months, it is reasonably possible that the resolution of ongoing examinations by tax authorities, as well as the expiration of statutes of limitation, could result in reductions to our unrecognized tax benefits related to tax positions taken as of June 30, 2018. The amount of any such reductions could range up to $125.0 million, all of which would have a positive impact on our effective tax rate. 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 the next 12 months. No assurance can be given as to the nature or impact of any changes in our unrecognized tax positions during the next 12 months.

We are currently undergoing income tax audits in Belgium, the Netherlands and the U.S. 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 2009 and 2010 income tax returns, and have entered into the appeals process with respect to the 2009 and 2010 matters. While we believe that the ultimate resolution of these proposed adjustments will not have a material impact on our consolidated financial position, results of operations or cash flows, no assurance can be given that this will be the case given the amounts involved and the complex nature of the related issues.

(11) Equity

Share Repurchases. During the six months ended June 30, 2018, we repurchased (i) 12,588,800 shares of our class A ordinary shares at an average price per share of $30.15 and (ii) 29,342,800 shares of our class C ordinary shares at an average price per share of $30.97, for an aggregate purchase price of $1,288.3 million, including direct acquisition costs. At June 30, 2018, the remaining amount authorized for share repurchases was $783.9 million. On July 31, 2018, our board of directors authorized an additional $500.0 million for share repurchases.

(12) 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 our aggregate share-based compensation expense is set forth below:

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in millions			
Liberty Global:				
Performance-based incentive awards (a)	$ 8.0	$ 19.1	$ 16.7	$ 19.8
Non-performance based share-based incentive awards	24.3	24.6	46.3	46.3
Other (b)	13.4	—	20.5	—
Total Liberty Global	45.7	43.7	83.5	66.1
Other	(0.2)	7.7	4.7	14.2
Total	$ 45.5	$ 51.4	$ 88.2	$ 80.3
Included in:				
Other operating expense	$ —	$ 0.9	$ 1.0	$ 1.9
SG&A expense	45.5	50.5	87.2	78.4
Total	$ 45.5	$ 51.4	$ 88.2	$ 80.3

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(a) Includes share-based compensation expense related to (i) performance-based restricted share units (**PSUs**) and (ii) through March 31, 2017, performance grant units (**PGUs**) held by our Chief Executive Officer.

(b) Represents annual incentive compensation and defined contribution plan liabilities that have been or are expected to be settled with Liberty Global ordinary shares. In the case of the annual incentive compensation, shares will be issued to senior management and key employees pursuant to a shareholding incentive program that was implemented in 2018. The shareholding incentive program allows these employees to elect to receive up to 100% of their annual incentive compensation in ordinary shares of Liberty Global in lieu of cash.

The following table provides the aggregate number of options and share appreciation rights (**SARs**) with respect to awards issued by Liberty Global that were (i) outstanding and (ii) exercisable as of June 30, 2018.

	Class A		Class C	
	Number of shares underlying awards	Weighted Average exercise or base price	Number of shares underlying awards	Weighted Average exercise or base price
Held by Liberty Global employees:				
Outstanding	16,106,261	$ 32.28	37,449,896	$ 30.38
Exercisable	9,311,226	$ 31.85	22,890,732	$ 29.65
Held by former Liberty Global employees:				
Outstanding	1,202,625	$ 32.72	2,825,949	$ 30.54
Exercisable	952,952	$ 31.91	2,325,227	$ 29.64

The following table provides the aggregate number of restricted share units (**RSUs**) and PSUs that were outstanding as of June 30, 2018:

	Class A	Class C
Held by Liberty Global employees:		
RSUs	640,075	1,265,060
PSUs	1,771,830	3,548,966
Held by former Liberty Global employees:		
RSUs	13,719	27,501
PSUs	172,971	346,299

2018 PSUs

In March and May 2018, the compensation committee of our board of directors approved the grant of an aggregate 1,114,280 and 2,228,560 Class A and Class C PSUs, respectively, to executive officers and key employees (the **2018 PSUs**) pursuant to a performance plan that is based on the achievement of a specified compound annual growth rate **(CAGR)** with respect to our Adjusted OIBDA (as defined in note 16) during the two-year period ending December 31, 2019. The 2018 PSUs include over- and under-performance payout opportunities should the Adjusted OIBDA CAGR exceed or fail to meet the target, as applicable. A performance range of 50% to 125% of the target Adjusted OIBDA CAGR will generally result in award recipients earning 50% to 150% of their target 2018 PSUs, subject to reduction or forfeiture based on individual performance. The earned 2018 PSUs will vest 50% on April 1, 2020 and 50% on October 1, 2020. As of June 30, 2018, the target Adjusted OIBDA CAGR has not been yet been determined. Accordingly, no share-based compensation expense has been recognized related to the 2018 PSUs and the table above does not include the 2018 PSUs.

(13) Restructuring Liability

A summary of changes in our restructuring liabilities during the six months ended June 30, 2018 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, 2018	$ 11.7	$ 9.5	$ 16.5	$ 37.7
Restructuring charges	22.2	4.5	41.8	68.5
Cash paid	(16.8)	(3.2)	(19.7)	(39.7)
Foreign currency translation adjustments	(0.4)	(0.3)	(2.2)	(2.9)
Restructuring liability as of June 30, 2018	$ 16.7	$ 10.5	$ 36.4	$ 63.6
Current portion	$ 15.2	$ 6.3	$ 25.8	$ 47.3
Noncurrent portion	1.5	4.2	10.6	16.3
Total	$ 16.7	$ 10.5	$ 36.4	$ 63.6

Our restructuring charges during the six months ended June 30, 2018 included $39.2 million of costs recorded during the first quarter in Belgium attributable to the migration of Telenet's mobile subscribers from a mobile virtual network operator (**MVNO**) arrangement to Telenet's mobile network. In March 2018, Telenet completed the migration and recorded the costs associated with meeting its minimum guarantee commitment under the MVNO agreement as a restructuring charge. Telenet's MVNO agreement does not expire until the end of 2018.

(14) 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 EPS presents the dilutive effect, if any, on a per share basis of potential shares (e.g., options, SARs, RSUs and PSUs) as if they had been exercised, vested or converted at the beginning of the periods presented.

The details of our net earnings (loss) from continuing operations attributable to Liberty Global shareholders are set forth below:

	Three months ended June 30,		Six months ended June 30,	
	2018	**2017**	**2018**	**2017**
	in millions			
Earnings (loss) from continuing operations	$ 668.7	$ (761.3)	$ (696.3)	$ (1,126.8)
Net earnings from continuing operations attributable to noncontrolling interests	(36.1)	(4.8)	(42.2)	(39.8)
Net earnings (loss) from continuing operations attributable to Liberty Global shareholders	$ 632.6	$ (766.1)	$ (738.5)	$ (1,166.6)

Our weighted average Liberty Global Share outstanding are set forth below:

	Three months ended June 30,		Six months ended June 30,	
	2018	**2017**	**2018**	**2017**
Weighted average ordinary shares outstanding (Liberty Global Shares):				
Basic	788,815,021	853,612,217	798,215,803	871,936,668
Diluted	791,920,021	853,612,217	798,215,803	871,936,668

We reported losses from continuing operations attributable to Liberty Global shareholders for the six months ended June 30, 2018 and the three and six months ended June 30, 2017. Therefore, the potentially dilutive effect at June 30, 2018 and 2017 of the following items were not included in the computation of diluted loss from continuing operations attributable to Liberty Global shareholders per share for such periods because their inclusion would have been anti-dilutive to the computation or, in the case of certain PSUs, because such awards had not yet met the applicable performance criteria: (i) the aggregate number of outstanding options, SARs and RSUs of 59.5 million and 55.5 million, respectively, and (ii) the aggregate number of PSUs of 5.8 million and 7.3 million, respectively.

The details of the calculations of our basic and diluted EPS from continuing operations for the three months ended June 30, 2018 are set forth in the following table:

Numerator:	
Net earnings from continuing operations attributable to Liberty Global shareholders (basic and diluted EPS computation) (in millions)	$ 632.6
Denominator (Liberty Global Shares):	
Weighted average ordinary shares (basic EPS computation)	788,815,021
Incremental shares attributable to the assumed exercise of outstanding options, SARs and the release of restricted shares and share units upon vesting (treasury stock method)	3,105,000
Weighted average ordinary shares outstanding (diluted EPS computation)	791,920,021

A total of 41.7 million options, SARs and RSUs were excluded from the calculation of diluted earnings per share set forth in the table above because their effect would have been anti-dilutive. In addition, at June 30, 2018, 5.8 million PSUs were excluded from the calculation of diluted earnings per share because such awards had not yet met the applicable performance criteria.

(15) 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 commitments, 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 for our continuing operations as of June 30, 2018. The commitments included in this table do not reflect liabilities that are included in our June 30, 2018 condensed consolidated balance sheet.

	Payments due during:							
	Remainder of 2018	2019	2020	2021	2022	2023	Thereafter	Total
	in millions							
Network and connectivity commitments	$ 402.8	$ 345.4	$ 283.4	$ 250.2	$ 67.5	$ 49.6	$ 787.8	$ 2,186.7
Programming commitments	544.1	792.9	470.3	227.7	40.3	14.7	46.6	2,136.6
Purchase commitments	506.7	306.9	136.2	47.7	20.8	17.5	38.6	1,074.4
Operating leases	70.4	99.6	79.0	60.0	47.8	40.1	151.0	547.9
Other commitments	9.8	15.2	2.8	0.4	0.2	—	—	28.4
Total	$ 1,533.8	$ 1,560.0	$ 971.7	$ 586.0	$ 176.6	$ 121.9	$ 1,024.0	$ 5,974.0

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. 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 $805.1 million and $720.0 million during the six months ended June 30, 2018 and 2017, respectively.

Network and connectivity commitments include (i) Telenet's commitments for certain operating costs associated with its leased network, (ii) commitments associated with our MVNO agreements 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.

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.

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 the six months ended June 30, 2018 and 2017, see note 6.

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.

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 four associations of municipalities in Belgium, which we refer to as the pure intercommunales or 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. 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 ($1.6 billion).

In December 2017, the Court of Appeals of Antwerp issued a judgment rejecting Proximus' claims. Proximus has the right to appeal the Court of Appeals of Antwerp's judgment with the Belgian Supreme Court, however Proximus has not done so to date. 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 ($23.4 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.

Telekom Deutschland Litigation. On December 28, 2012, Unitymedia filed a lawsuit against Telekom Deutschland GmbH (**Telekom Deutschland**), in which Unitymedia asserts that it pays excessive prices for the co-use of Telekom Deutschland's cable ducts in Unitymedia's footprint. The Federal Network Agency approved rates for the co-use of certain ducts of Telekom Deutschland in March 2011. Based in part on these approved rates, Unitymedia initially sought a reduction of the annual lease fees (approximately €76 million ($89 million) for 2017) by approximately two-thirds and has subsequently increased its claim to seek a reduction by approximately five-sixths. In addition, Unitymedia is seeking 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, and in March 2018, the court of appeal dismissed Unitymedia's appeal of the first instance court's decision and did not grant permission to appeal further to the Federal Court of Justice. Unitymedia has filed a motion with the Federal Court of Justice to grant permission to appeal. 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. If this matter is settled subsequent to the completion of the sale of the Vodafone Disposal Group, we would only share in 50% of any amounts recovered, plus 50% of the net present value of certain cost savings in future periods that are attributable to the favorable resolution of this matter, less 50% of associated legal or other third-party fees paid post-completion of the sale of the Vodafone Disposal Group.

Belgium Regulatory Developments. In June 2018, the Belgisch Instituut voor Post en Telecommunicatie and the regional regulators for the media sectors (together, the **Belgium Regulatory Authorities**) adopted a new decision finding that Telenet has significant market power in the wholesale broadband market (the **2018 Decision**). The 2018 Decision imposes on Telenet the obligations to (i) provide third-party operators with access to the digital television platform (including basic digital video and analog video) and (ii) make available to third-party operators a bitstream offer of broadband internet access (including fixed-line telephony as an option). Unlike prior decisions, the 2018 Decision no longer applies "retail minus" pricing on Telenet; however, as of August 1, 2018, this decision imposes a 17% reduction in monthly wholesale cable resale access prices for an interim period. The Belgium Regulatory Authorities will replace these interim prices with "reasonable access tariffs" around mid-2019.

The 2018 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 afforded to Telenet's network, the rates that Telenet receives for such access and other competitive factors or market developments. Telenet considers the 2018 Decision to be inconsistent with the principle of technology-neutral regulation and the European Single Market Strategy to stimulate further investments in broadband networks and intends to challenge the 2018 Decision to the Brussels Court of Appeal.

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 £47 million ($62 million) as of June 30, 2018. 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. A court hearing was held in September 2017 and the timing of the court's decision is uncertain. No portion of this potential exposure has been accrued by our company as the likelihood of loss is not considered to be probable.

Ziggo Acquisition Matter. In July 2015, KPN N.V. appealed the European Commission's 2014 approval of the acquisition by Liberty Global of Ziggo Holding B.V. (**Ziggo**). We were not a party to that case. In October 2017, the E.U. General Court annulled the European Commission's approval on procedural grounds in that it found that the European Commission had failed to adequately explain the reasons for elements of its decision. We re-notified our acquisition of Ziggo to the European Commission for a new merger clearance, which was granted on May 30, 2018, and conditioned on remedies substantially similar to the remedies upon which the 2014 merger clearance was based. We consider this matter to be closed.

Other Regulatory Issues. Video distribution, broadband internet, fixed-line telephony, mobile and content businesses are regulated in each of the countries in which we or our affiliates 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, has and will continue to significantly increase our network infrastructure charges. We expect the full year 2018 impact of this increase will be approximately £18 million ($24 million), as compared to 2017, and the impact will build to an aggregate increase of up to £110 million ($145 million) in 2021, as compared to the 12 months ended March 31, 2017. 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 U.K. government.

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.

(16) Segment Reporting

We generally identify our reportable segments as (i) those consolidated subsidiaries that represent 10% or more of our revenue, Adjusted OIBDA (as defined below) or total assets or (ii) those equity method affiliates where our investment or share of revenue or Adjusted OIBDA represents 10% or more of our total assets, revenue or Adjusted OIBDA, respectively. 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 OIBDA is the primary measure used by our chief operating decision maker to evaluate segment operating performance and 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 Adjusted OIBDA from continuing operations to earnings (loss) from continuing operations before income taxes is presented below.

As of June 30, 2018, our reportable segments are as follows:

Consolidated:

- U.K./Ireland
- Belgium
- Switzerland
- Central and Eastern Europe

Nonconsolidated:

- VodafoneZiggo JV

Segment information for all periods has been retrospectively revised to present the LiLAC Group and our operating segments in Austria, Germany, Hungary, the Czech Republic and Romania as discontinued operations. As a result, (i) our former Switzerland/Austria reportable segment now only includes our operations in Switzerland and (ii) our Central and Eastern Europe segment now only includes (a) our broadband communications operations in Poland and Slovakia and (b) "**UPC DTH**", which is a Luxembourg-based organization that provides direct-to-home satellite (**DTH**) services to customers in the Czech Republic, Hungary, Romania and Slovakia. Our central and corporate functions are included in an operating segment that we refer to as "**Central and Corporate**," which primarily includes (1) revenue earned from services provided to the VodafoneZiggo JV and Liberty Latin America, (2) revenue from sales of customer premises equipment to the VodafoneZiggo JV and (3) costs associated with certain centralized functions, including billing systems, network operations, technology, marketing, facilities, finance and other administrative functions. On January 1, 2018, our wholesale handset program was transferred from Germany to an entity included in Central and Corporate. In connection with our presentation of our operating segment in Germany as a discontinued operation, the 2017 periods presented herein have been retrospectively revised to reflect this change.

We present only the reportable segments of our continuing operations in the tables below.

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, we consolidate 100% of Telenet's revenue and expenses in our condensed consolidated statements of operations despite the fact that third parties own a significant interest. The noncontrolling owners' interests in the operating results of Telenet and other less significant majority-owned subsidiaries are reflected in net earnings or loss attributable to noncontrolling interests in our condensed consolidated statements of operations. Similarly, despite only holding a 50% noncontrolling interest in the VodafoneZiggo JV, we present 100% of its revenue and Adjusted OIBDA in the tables below. Our share of the VodafoneZiggo JV's operating results is included in share of losses of affiliates, net, in our condensed consolidated statements of operations.

	Revenue			
	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in millions			
U.K./Ireland	$ 1,734.9	$ 1,566.1	$ 3,513.1	$ 3,070.5
Belgium	753.9	686.0	1,513.5	1,347.4
Switzerland	332.2	339.0	677.1	670.2
Central and Eastern Europe	152.9	142.0	313.4	277.1
Central and Corporate	72.0	42.7	123.8	83.5
Intersegment eliminations	(0.8)	(0.9)	(1.3)	(4.0)
Total	$ 3,045.1	$ 2,774.9	$ 6,139.6	$ 5,444.7
VodafoneZiggo JV	$ 1,114.5	$ 1,081.3	$ 2,296.1	$ 2,165.2

	Adjusted OIBDA			
	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in millions			
U.K./Ireland	$ 763.6	$ 707.1	$ 1,526.2	$ 1,353.1
Belgium	383.7	317.9	741.3	615.8
Switzerland	189.0	212.9	375.5	417.7
Central and Eastern Europe	67.9	64.6	139.8	123.1
Central and Corporate	(83.6)	(98.7)	(182.7)	(191.7)
Intersegment eliminations (a)	(10.8)	(8.4)	(18.5)	(16.2)
Total	$ 1,309.8	$ 1,195.4	$ 2,581.6	$ 2,301.8
VodafoneZiggo JV	$ 483.6	$ 471.1	$ 985.5	$ 930.6

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(a) Amounts are related to transactions between our continuing and discontinued operations, which eliminations will no longer be recorded subsequent to the respective disposals of UPC Austria and the Vodafone Disposal Group.

The following table provides a reconciliation of Adjusted OIBDA from continuing operations to earnings (loss) from continuing operations before income taxes:

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in millions			
Adjusted OIBDA from continuing operations	$ 1,309.8	$ 1,195.4	$ 2,581.6	$ 2,301.8
Share-based compensation expense	(45.5)	(51.4)	(88.2)	(80.3)
Depreciation and amortization	(970.2)	(922.0)	(2,017.5)	(1,789.7)
Impairment, restructuring and other operating items, net	(30.2)	(13.1)	(91.6)	(6.4)
Operating income	263.9	208.9	384.3	425.4
Interest expense	(381.1)	(348.8)	(757.0)	(688.3)
Realized and unrealized gains (losses) on derivative instruments, net	675.5	(351.7)	464.2	(596.1)
Foreign currency transaction gains (losses), net	52.1	(18.2)	(49.6)	11.0
Realized and unrealized gains (losses) due to changes in fair values of certain investments and debt, net	61.5	(141.4)	4.3	(42.6)
Losses on debt modification and extinguishment, net	(20.1)	(53.6)	(22.7)	(98.9)
Share of losses of affiliates, net	(82.3)	(3.6)	(118.8)	(19.3)
Other income, net	6.4	15.8	16.2	32.4
Earnings (loss) from continuing operations before income taxes	$ 575.9	$ (692.6)	$ (79.1)	$ (976.4)

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 condensed consolidated statements of cash flows. For additional information concerning capital additions financed under vendor financing and capital lease arrangements, see note 8.

	Six months ended June 30,	
	2018	**2017**
	in millions	
U.K./Ireland	$ 1,040.1	$ 970.7
Belgium	355.2	288.4
Switzerland	105.2	96.5
Central and Eastern Europe	71.9	117.0
Central and Corporate (a)	278.0	159.1
Total property and equipment additions	1,850.4	1,631.7
Assets acquired under capital-related vendor financing arrangements	(1,187.9)	(1,164.1)
Assets acquired under capital leases	(46.5)	(97.9)
Changes in current liabilities related to capital expenditures	181.8	218.3
Total capital expenditures, net	$ 797.8	$ 588.0
Capital expenditures, net:		
Third-party payments	$ 855.1	$ 782.9
Proceeds received for transfers to related parties (b)	(57.3)	(194.9)
Total capital expenditures, net	$ 797.8	$ 588.0
Property and equipment additions - VodafoneZiggo JV	$ 476.6	$ 444.5

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(a) Includes amounts that represent the net impact of changes in inventory levels associated with certain centrally-procured network equipment. This equipment is ultimately transferred to our operating subsidiaries.

(b) Primarily relates to transfers of centrally-procured property and equipment to our discontinued operations and the VodafoneZiggo JV.

Revenue by Major Category

Our revenue by major category for our consolidated reportable segments is set forth below.

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in millions			
Residential revenue:				
Residential cable revenue (a):				
Subscription revenue (b):				
Video	$ 743.5	$ 717.3	$ 1,518.1	$ 1,406.2
Broadband internet	816.7	724.8	1,657.9	1,430.7
Fixed-line telephony	407.7	395.9	829.7	787.6
Total subscription revenue	1,967.9	1,838.0	4,005.7	3,624.5
Non-subscription revenue	72.4	76.9	154.1	157.8
Total residential cable revenue	2,040.3	1,914.9	4,159.8	3,782.3
Residential mobile revenue (c):				
Subscription revenue (b)	249.6	245.8	493.4	482.1
Non-subscription revenue	175.2	134.3	354.7	260.9
Total residential mobile revenue	424.8	380.1	848.1	743.0
Total residential revenue	2,465.1	2,295.0	5,007.9	4,525.3
B2B revenue (d):				
Subscription revenue	102.9	91.2	219.6	168.5
Non-subscription revenue	400.2	337.9	771.4	652.7
Total B2B revenue	503.1	429.1	991.0	821.2
Other revenue (e)	76.9	50.8	140.7	98.2
Total	$ 3,045.1	$ 2,774.9	$ 6,139.6	$ 5,444.7

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(a) Residential cable subscription revenue includes amounts received from subscribers for ongoing services. Residential cable non-subscription revenue includes, among other items, channel carriage fees, late fees and revenue from the sale of equipment. As described in note 2, we adopted ASU 2014-09 on January 1, 2018 using the cumulative effect transition method. For periods subsequent to our adoption of ASU 2014-09, installation revenue is generally deferred and recognized over the contractual period as residential cable subscription revenue. For periods prior to the adoption of ASU 2014-09, installation revenue is included in residential cable non-subscription revenue.

(b) Residential 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.

(c) Residential mobile subscription revenue includes amounts received from subscribers for ongoing services. Residential mobile non-subscription revenue includes, among other items, interconnect revenue and revenue from sales of mobile handsets and other devices.

(d) B2B subscription revenue represents revenue from 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. B2B non-subscription revenue includes business broadband internet, video, fixed-line telephony, mobile and data services offered to medium to large enterprises and, on a wholesale basis, to other operators.

(e) Other revenue includes, among other items, revenue earned from the JV Services, broadcasting revenue in Ireland and revenue from Central and Corporate's wholesale handset program. In addition, the 2018 periods include revenue earned from (i) sales of customer premises equipment to the VodafoneZiggo JV and (ii) services provided to Liberty Latin America.

Geographic Segments

The revenue of our geographic segments is set forth below:

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in millions			
U.K.	$ 1,605.6	$ 1,454.8	$ 3,250.0	$ 2,855.2
Belgium	753.9	686.0	1,513.5	1,347.4
Switzerland	332.2	339.0	677.1	670.2
Ireland	129.3	111.3	263.1	215.3
Poland	110.4	101.8	226.4	197.7
Slovakia	15.8	14.6	32.3	28.9
Other, including intersegment eliminations (a)	97.9	67.4	177.2	130.0
Total	$ 3,045.1	$ 2,774.9	$ 6,139.6	$ 5,444.7
VodafoneZiggo JV (the Netherlands)	$ 1,114.5	$ 1,081.3	$ 2,296.1	$ 2,165.2

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(a) Includes revenue from DTH services provided to customers in the Czech Republic, Hungary and Romania.

(17) <u>Subsequent Event</u>

Telenet Dividend. On August 1, 2018, Telenet announced that its board of directors proposed an extraordinary dividend payment of €600.0 million ($700.6 million). This dividend payment, which is subject to shareholder approval, is expected to be made in October 2018 and financed with additional borrowings under the Telenet Credit Facility.

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis, which should be read in conjunction with our condensed consolidated financial statements and the discussion and analysis included in our 10-K, is intended to assist in providing an understanding of our financial condition, changes in financial condition and results of operations and is organized as follows:

- *Forward-looking Statements.* This section provides a description of certain factors that could cause actual results or events to differ materially from anticipated results or events.
- *Overview.* This section provides a general description of our business and recent events.
- *Material Changes in Results of Operations.* This section provides an analysis of our results of operations for the three and six months ended June 30, 2018 and 2017.
- *Material Changes in Financial Condition.* This section provides an analysis of our corporate and subsidiary liquidity, condensed consolidated statements of cash flows and contractual commitments.

The capitalized terms used below have been defined in the notes to our condensed consolidated financial statements. In the following text, the terms "we," "our," "our company" and "us" may refer, as the context requires, to Liberty Global or collectively to Liberty Global and its subsidiaries.

Unless otherwise indicated, convenience translations into U.S. dollars are calculated as of June 30, 2018.

Forward-looking Statements

Certain statements in this Quarterly Report on Form 10-Q constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. To the extent that statements in this Quarterly Report are not recitations of historical fact, such statements constitute forward-looking statements, which, by definition, involve risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements. In particular, statements under *Management's Discussion and Analysis of Financial Condition and Results of Operations* and *Quantitative and Qualitative Disclosures About Market Risk* may contain forward-looking statements, including statements regarding our business, product, foreign currency and finance strategies, our property and equipment additions (including with respect to the Network Extensions, as defined below), subscriber growth and retention rates, competitive, regulatory and economic factors, the timing and impacts of proposed transactions, the maturity of our markets, the anticipated impacts of new legislation (or changes to existing rules and regulations), anticipated changes in our revenue, costs or growth rates, our liquidity, credit risks, foreign currency risks, target leverage levels, our future projected contractual commitments and cash flows and other information and statements that are not historical fact. Where, in any forward-looking statement, we express an expectation or belief as to future results or events, such expectation or belief is expressed in good faith and believed to have a reasonable basis, but there can be no assurance that the expectation or belief will result or be achieved or accomplished. In evaluating these statements, you should consider the risks and uncertainties discussed in our 10-K, as well as the following list of some but not all of the factors that could cause actual results or events to differ materially from anticipated results or events:

- economic and business conditions and industry trends in the countries in which we or our affiliates operate;
- the competitive environment in the industries in the countries in which we or our affiliates operate, including competitor responses to our products and services;
- fluctuations in currency exchange rates and interest rates;
- instability in global financial markets, including sovereign debt issues and related fiscal reforms;
- consumer disposable income and spending levels, including the availability and amount of individual consumer debt;
- changes in consumer television viewing preferences and habits;
- consumer acceptance of our existing service offerings, including our cable television, broadband internet, fixed-line telephony, mobile and business service offerings, and of new technology, programming alternatives and other products and services that we may offer in the future;
- our ability to manage rapid technological changes;

- our ability to maintain or increase the number of subscriptions to our cable television, broadband internet, fixed-line telephony and mobile service offerings and our average revenue per household;
- our ability to provide satisfactory customer service, including support for new and evolving products and services;
- our ability to maintain or increase rates to our subscribers or to pass through increased costs to our subscribers;
- the impact of our future financial performance, or market conditions generally, on the availability, terms and deployment of capital;
- changes in, or failure or inability to comply with, government regulations in the countries in which we or our affiliates operate and adverse outcomes from regulatory proceedings;
- government intervention that requires opening our broadband distribution networks to competitors, such as the obligations imposed in Belgium;
- our ability to obtain regulatory approval and satisfy other conditions necessary to close acquisitions and dispositions (including the disposition of the Vodafone Disposal Group) and the impact of conditions imposed by competition and other regulatory authorities in connection with acquisitions;
- our ability to successfully acquire new businesses and, if acquired, to integrate, realize anticipated efficiencies from, and implement our business plan with respect to, the businesses we have acquired or that we expect to acquire;
- changes in laws or treaties relating to taxation, or the interpretation thereof, in the U.K., the U.S. or in other countries in which we or our affiliates operate;
- changes in laws and government regulations that may impact the availability and cost of capital and the derivative instruments that hedge certain of our financial risks;
- the ability of suppliers and vendors (including our third-party wireless network providers under our MVNO arrangements) to timely deliver quality products, equipment, software, services and access;
- the availability of attractive programming for our video services and the costs associated with such programming, including retransmission and copyright fees payable to public and private broadcasters;
- uncertainties inherent in the development and integration of new business lines and business strategies;
- our ability to adequately forecast and plan future network requirements, including the costs and benefits associated with the Network Extensions;
- the availability of capital for the acquisition and/or development of telecommunications networks and services;
- problems we may discover post-closing with the operations, including the internal controls and financial reporting process, of businesses we acquire;
- the leakage of sensitive customer data;
- the outcome of any pending or threatened litigation;
- the loss of key employees and the availability of qualified personnel;
- changes in the nature of key strategic relationships with partners and joint venturers;
- our equity capital structure; and
- events that are outside of our control, such as political unrest in international markets, terrorist attacks, malicious human acts, natural disasters, pandemics and other similar events.

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

Overview

General

We are an international provider of video, broadband internet, fixed-line telephony, mobile and other communications services to residential customers and businesses in Europe. We provide residential and B2B communication services in (i) the U.K. and Ireland through Virgin Media, (ii) Belgium through Telenet and (iii) Poland and Slovakia through UPC Holding. In addition, we own a 50% noncontrolling interest in the VodafoneZiggo JV, which provides video, broadband internet, fixed-line telephony, mobile and B2B communications services in the Netherlands.

As further described in note 4 to our condensed consolidated financial statements, we (i) completed the sale of our operations in Austria on July 31, 2018, (ii) reached an agreement to sell our operations in Germany, Romania, Hungary and the Czech Republic on May 9, 2018 and (iii) completed the Split-off Transaction on December 29, 2017. Accordingly, (a) our operations in Austria, Germany, Romania, Hungary and the Czech Republic are reflected as discontinued operations for all periods presented herein and (b) the entities comprising the LiLAC Group are reflected as discontinued operations in our condensed consolidated statements of operations and cash flows the three and six months ended June 30, 2017. In the following discussion and analysis, the operating statistics, results of operations, cash flows and financial condition that we present and discuss are those of our continuing operations unless otherwise indicated.

Operations

At June 30, 2018, our continuing operations owned and operated networks that passed 24,786,800 homes and served 26,079,400 revenue generating units (**RGUs**), consisting of 9,452,000 video subscribers, 9,234,100 broadband internet subscribers and 7,393,300 fixed-line telephony subscribers. In addition, at June 30, 2018, our continuing operations served 5,956,400 mobile subscribers.

We currently are engaged in certain network extension programs across our footprint, which we collectively refer to as the "**Network Extensions**." During the first six months of 2018, pursuant to the Network Extensions, our continuing operations connected approximately 315,000 additional residential and commercial premises (excluding upgrades) to our two-way networks, including approximately 229,000 residential and commercial premises connected by Virgin Media in the U.K. and Ireland. Depending on a variety of factors, including the financial and operational results of the programs, the Network Extensions may be continued, modified or cancelled at our discretion.

Competition and Other External Factors

We are experiencing significant competition from incumbent telecommunications operators, DTH operators and/or other providers in all of our markets. The significant competition we are experiencing, together with macroeconomic and regulatory factors, has adversely impacted our revenue, RGUs and/or average monthly subscription revenue per average cable RGU or mobile subscriber, as applicable (**ARPU**), particularly in Switzerland and Belgium. In addition, the VodafoneZiggo JV is facing significant competition in the Netherlands, particularly with respect to its mobile operations. For additional information regarding the revenue impact of changes in the RGUs and ARPU of our consolidated reportable segments, see *Discussion and Analysis of our Reportable Segments* below.

In addition to competition, our operations are subject to macroeconomic, political and other risks that are outside of our control. For example, on June 23, 2016, the U.K. held a referendum in which U.K. citizens voted in favor of, on an advisory basis, an exit from the E.U. commonly referred to as "**Brexit**." Brexit is currently scheduled to occur on March 29, 2019. The potential impacts, if any, of the uncertainty relating to Brexit or the resulting terms of Brexit on the free movement of goods, services, people and capital between the U.K. and the E.U., customer behavior, economic conditions, interest rates, currency exchange rates, availability of capital or other matters are unclear. The effects of Brexit could adversely affect our business, results of operations, financial condition and liquidity.

Material Changes in Results of Operations

We have completed a number of transactions that impact the comparability of our results of operations, the most notable of which is the SFR BeLux Acquisition on June 19, 2017. For further information regarding our pending and completed acquisitions and dispositions, see note 4 to our condensed consolidated financial statements.

In the following discussion, we quantify the estimated impact of acquisitions (the **Acquisition Impact**) on our operating results. The Acquisition Impact represents our estimate of the difference between the operating results of the periods under comparison that is attributable to an acquisition. In general, we base our estimate of the Acquisition Impact on an acquired entity's operating results during the first three to twelve months following the acquisition date, as adjusted to remove integration costs and any other material unusual or nonoperational items, such that changes from those operating results in subsequent periods are considered to be organic changes. Accordingly, in the following discussion, (i) organic variances attributed to an acquired entity during the first 12 months following the acquisition date represent differences between the Acquisition Impact and the actual results and (ii) the calculation of our organic change percentages includes the organic activity of an acquired entity relative to the Acquisition Impact of such entity.

Changes in foreign currency exchange rates have a significant impact on our reported operating results as all of our operating segments have functional currencies other than the U.S. dollar. Our primary exposure to foreign exchange (**FX**) risk during the three months ended June 30, 2018 was to the euro and British pound sterling as 31.6% and 53.2% of our reported revenue during the period was derived from subsidiaries whose functional currencies are the euro and British pound sterling, respectively. In addition, our reported operating results are impacted by changes in the exchange rates for certain other local currencies in Europe. The portions of the changes in the various components of our results of operations that are attributable to changes in FX are highlighted under *Discussion and Analysis of our Reportable Segments* and *Discussion and Analysis of our Consolidated Operating Results* below. For information regarding the applicable foreign currency exchange rates in effect for the periods covered by this Quarterly Report, see *Quantitative and Qualitative Disclosures about Market Risk — Foreign Currency Exchange Rates* below.

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

As further described in note 2 to our condensed consolidated financial statements, we adopted ASU 2014-09 on January 1, 2018 using the cumulative effect transition method. As such, the comparative information for the three and six months ended June 30, 2017 included in our condensed consolidated financial statements and notes thereto has not been restated and continues to be reported under the accounting standards in effect for such periods. In order to provide more meaningful comparisons, in the following discussion and analysis of our results of operations, we present our revenue, other operating expenses, SG&A expenses and Adjusted OIBDA for the three and six months ended June 30, 2017 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.

The following table presents (i) the impact of the adoption of ASU 2014-09 on the revenue and Adjusted OIBDA of our reportable segments for the three and six months ended June 30, 2018 and (ii) the pro forma impact of the adoption of ASU 2014-09 on the revenue and Adjusted OIBDA of our consolidated reportable segments for the three and six months ended June 30, 2017 as if such adoption had occurred on January 1, 2017.

	Three months ended June 30,		Six months ended June 30,	
	2018	2017 (a)	2018	2017 (a)
	in millions			
Increase (decrease) to revenue:				
U.K./Ireland	$ 11.2	$ (2.3)	$ 16.8	$ (4.2)
Belgium	(2.8)	(1.2)	(4.3)	(2.6)
Switzerland	(0.3)	(0.3)	(0.8)	(1.2)
Central and Eastern Europe	(0.1)	(0.2)	(0.2)	(0.8)
Total increase (decrease) to revenue	$ 8.0	$ (4.0)	$ 11.5	$ (8.8)
Increase (decrease) to Adjusted OIBDA:				
U.K./Ireland	$ 8.6	$ (6.1)	$ 8.6	$ (9.2)
Belgium	(2.8)	(1.2)	(4.3)	(2.6)
Switzerland	(1.1)	(0.5)	(1.7)	(1.6)
Central and Eastern Europe	(0.4)	0.2	(0.4)	—
Total increase (decrease) to Adjusted OIBDA	$ 4.3	$ (7.6)	$ 2.2	$ (13.4)

(a) Amounts are presented 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.

Discussion and Analysis of our Consolidated Reportable Segments

General

All of the reportable segments set forth below derive their revenue primarily from residential and B2B communications services, including video, broadband internet, fixed-line telephony and mobile services. For detailed information regarding the composition of our reportable segments and how we define and categorize our revenue components, see note 16 to our condensed consolidated financial statements. For more information regarding the results of operations of the VodafoneZiggo JV, refer to *Discussion and Analysis of our Consolidated Operating Results — Share of losses of affiliates* below.

The tables presented below in this section provide the details of the revenue and Adjusted OIBDA of our consolidated reportable segments for the three and six months ended June 30, 2018 and 2017. As discussed above, the amounts for the three and six months ended June 30, 2017 are presented 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. These tables present (i) the amounts reported for the current and comparative periods, (ii) the reported U.S. dollar change and percentage change from period to period and (iii) the organic U.S. dollar change and percentage change from period to period. The comparisons that exclude FX assume that exchange rates remained constant at the prior-year rate during the comparative period that is included in each table. We also provide a table showing the Adjusted OIBDA margins of our consolidated reportable segments for the three and six months ended June 30, 2018 and 2017 at the end of this section.

Revenue of our Consolidated Reportable Segments

General. While not specifically discussed in the below explanations of the changes in the revenue of our consolidated reportable segments, we are experiencing significant competition in all of our markets. This competition has an adverse impact on our ability to increase or maintain our RGUs and/or ARPU.

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

Revenue

	Three months ended June 30,		Increase (decrease)		Organic increase (decrease)	
	2018	2017	$	%	$	%
		pro forma				
			in millions, except percentages			
U.K./Ireland	$ 1,734.9	$ 1,563.8	$ 171.1	10.9	$ 64.3	4.1
Belgium	753.9	684.8	69.1	10.1	(5.2)	(0.7)
Switzerland	332.2	338.7	(6.5)	(1.9)	(6.5)	(1.9)
Central and Eastern Europe	152.9	141.8	11.1	7.8	0.4	0.3
Central and Corporate (a)	72.0	42.7	29.3	68.6	25.0	58.0
Intersegment eliminations	(0.8)	(0.9)	0.1	N.M.	0.1	N.M.
Total	$ 3,045.1	$ 2,770.9	$ 274.2	9.9	$ 78.1	2.8

	Six months ended June 30,		Increase		Organic increase (decrease)	
	2018	2017	$	%	$	%
		pro forma				
	in millions, except percentages					
U.K./Ireland	$ 3,513.1	$ 3,066.3	$ 446.8	14.6	$ 142.4	4.7
Belgium	1,513.5	1,344.8	168.7	12.5	(15.3)	(1.1)
Switzerland	677.1	669.0	8.1	1.2	(11.3)	(1.6)
Central and Eastern Europe	313.4	276.3	37.1	13.4	1.9	0.7
Central and Corporate (a)	123.8	83.5	40.3	48.3	28.5	33.8
Intersegment eliminations	(1.3)	(4.0)	2.7	N.M.	2.7	N.M.
Total	$ 6,139.6	$ 5,435.9	$ 703.7	12.9	$ 148.9	2.7

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(a) Amounts primarily include the revenue earned from services provided to the VodafoneZiggo JV and, during the 2018 periods, Liberty Latin America. For additional information, see note 5 to our condensed consolidated financial statements.

N.M. — Not Meaningful.

U.K./Ireland. The details of the pro forma increases in U.K./Ireland's revenue during the three and six months ended June 30, 2018, as compared to the corresponding periods in 2017, are set forth below:

	Three-month period			Six-month period		
	Subscription revenue	Non-subscription revenue	Total	Subscription revenue	Non-subscription revenue	Total
	in millions					
Increase in residential cable subscription revenue due to change in:						
Average number of RGUs (a)	$ 14.6	$ —	$ 14.6	$ 30.8	$ —	$ 30.8
ARPU (b)	13.2	—	13.2	29.6	—	29.6
Decrease in residential cable non-subscription revenue	—	(1.1)	(1.1)	—	(0.2)	(0.2)
Total increase (decrease) in residential cable revenue	27.8	(1.1)	26.7	60.4	(0.2)	60.2
Increase (decrease) in residential mobile revenue (c)	(1.4)	30.2	28.8	(4.3)	63.1	58.8
Increase (decrease) in B2B revenue (d)	6.6	(0.1)	6.5	13.7	2.2	15.9
Increase in other revenue (e)	—	2.3	2.3	—	7.5	7.5
Total organic increase	33.0	31.3	64.3	69.8	72.6	142.4
Impact of FX	83.4	23.4	106.8	237.3	67.1	304.4
Total	$ 116.4	$ 54.7	$ 171.1	$ 307.1	$ 139.7	$ 446.8

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(a) The increases in residential cable subscription revenue related to changes in the average number of RGUs are attributable to increases in the average number of broadband internet, video and fixed-line telephony RGUs.

(b) The increases in cable subscription revenue related to changes in ARPU are primarily attributable to (i) net increases due to (a) higher ARPU from broadband internet services and (b) lower ARPU from fixed-line telephony and video services and (ii) improvements in RGU mix.

(c) The decreases in residential mobile subscription revenue relate to the net effect of (i) decreases in the U.K., due primarily to lower ARPU, and (ii) increases in Ireland, mainly due to increases in the average number of mobile subscribers. The increases in residential mobile non-subscription revenue are primarily due to increases in revenue from mobile handset sales in the U.K., which typically generate relatively low margins.

(d) The increases in B2B subscription revenue are primarily due to increases in the average number of broadband internet SOHO subscribers in the U.K. The changes in B2B non-subscription revenue are primarily driven by changes in the U.K., including the net effect of (i) higher revenue related to business network services, (ii) decreases in interconnect revenue, (iii) decreases in installation revenue and (iv) decreases in early termination fees.

(e) The increases in other revenue are largely due to increases in broadcasting revenue in Ireland.

Belgium. The details of the pro forma increases in Belgium's revenue during the three and six months ended June 30, 2018, as compared to the corresponding periods in 2017, are set forth below:

	Three-month period			Six-month period		
	Subscription revenue	Non-subscription revenue	Total	Subscription revenue	Non-subscription revenue	Total
	in millions					
Increase (decrease) in residential cable subscription revenue due to change in:						
Average number of RGUs (a)	$ 0.9	$ —	$ 0.9	$ (23.3)	$ —	$ (23.3)
ARPU (b)	(12.2)	—	(12.2)	0.6	—	0.6
Decrease in residential cable non-subscription revenue (c)	—	(1.7)	(1.7)	—	(6.3)	(6.3)
Total decrease in residential cable revenue	(11.3)	(1.7)	(13.0)	(22.7)	(6.3)	(29.0)
Decrease in residential mobile revenue (d)	(5.3)	(1.0)	(6.3)	(14.0)	(2.6)	(16.6)
Increase (decrease) in B2B revenue (e)	(4.3)	18.4	14.1	11.7	18.6	30.3
Total organic increase (decrease)	(20.9)	15.7	(5.2)	(25.0)	9.7	(15.3)
Impact of acquisitions	12.1	9.6	21.7	26.6	11.5	38.1
Impact of disposals	(4.0)	(1.4)	(5.4)	(11.4)	(2.0)	(13.4)
Impact of FX	43.5	14.5	58.0	121.3	38.0	159.3
Total	$ 30.7	$ 38.4	$ 69.1	$ 111.5	$ 57.2	$ 168.7

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(a) The changes in residential cable subscription revenue related to changes in the average number of RGUs are primarily attributable to the net effect of (i) decreases in the average number of video RGUs, (ii) for the six-month comparison, decreases in the average number of broadband internet and fixed-line telephony RGUs and (iii) for the three-month comparison, an increase in the average number of broadband internet RGUs.

(b) The decrease in residential cable subscription revenue related to changes in ARPU for the three-month comparison is primarily attributable to lower ARPU from broadband internet, video and fixed-line telephony services. The increase for the six-month comparison is primarily attributable to the net effect of lower ARPU from fixed-line telephony services and higher ARPU from broadband internet and, to a lesser extent, video services. In addition, the change in ARPU during both periods was positively impacted by improvements in RGU mix.

(c) The decreases in residential cable non-subscription revenue are primarily attributable to the net effect of (i) for the six-month comparison, a decrease of $5.6 million related to adjustments recorded during the 2017 period to reflect the expected recovery of certain prior-period VAT payments and (ii) increases in distribution revenue.

(d) The decreases in residential mobile subscription revenue are primarily due to the net effect of (i) lower ARPU and (ii) increases in the average number of mobile subscribers. The decreases in residential mobile non-subscription revenue are

primarily attributable to the net effect of (a) an increase for the three-month comparison and a decrease for the six-month comparison in revenue from sales of mobile handsets and other devices and (b) decreases in early termination fees.

(e) The changes in B2B subscription revenue are primarily attributable to the net effect of (i) increases in broadband internet and video SOHO subscribers and (ii) lower ARPU from mobile SOHO services. The increases in B2B non-subscription revenue are primarily due to (i) higher revenue from wholesale services and (ii) increases in interconnect revenue.

For information concerning certain regulatory developments that could have an adverse impact on our revenue in Belgium, see "*Belgium Regulatory Developments*" in note 15 to our condensed consolidated financial statements.

Switzerland. The details of the pro forma changes in Switzerland's revenue during the three and six months ended June 30, 2018, as compared to the corresponding periods in 2017, are set forth below:

	Three-month period			Six-month period		
	Subscription revenue	Non-subscription revenue	Total	Subscription revenue	Non-subscription revenue	Total
	in millions					
Decrease in residential cable subscription revenue due to change in:						
Average number of RGUs (a)	$ (9.2)	$ —	$ (9.2)	$ (13.1)	$ —	$ (13.1)
ARPU (b)	(14.3)	—	(14.3)	(32.3)	—	(32.3)
Increase in residential cable non-subscription revenue (c)	—	4.0	4.0	—	12.6	12.6
Total increase (decrease) in residential cable revenue	(23.5)	4.0	(19.5)	(45.4)	12.6	(32.8)
Increase in residential mobile revenue (d)	4.0	0.8	4.8	7.2	1.3	8.5
Increase in B2B revenue (e)	0.4	7.1	7.5	0.8	11.3	12.1
Increase in other revenue	—	0.7	0.7	—	0.9	0.9
Total organic increase (decrease)	(19.1)	12.6	(6.5)	(37.4)	26.1	(11.3)
Impact of FX	(0.2)	0.2	—	15.4	4.0	19.4
Total	$ (19.3)	$ 12.8	$ (6.5)	$ (22.0)	$ 30.1	$ 8.1

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(a) The decreases in residential cable subscription revenue related to changes in the average number of RGUs are attributable to the net effect of (i) declines in the average number of video and broadband internet RGUs and (ii) increases in the average number of fixed-line telephony RGUs.

(b) The decreases in residential cable subscription revenue related to changes in ARPU are primarily attributable to decreases due to lower ARPU from video, fixed-line telephony and broadband internet services, including, for the six-month comparison, the reversal during the first quarter of 2018 of $3.9 million of revenue in Switzerland that was recognized during prior-year periods.

(c) The increases in residential cable non-subscription revenue are primarily attributable to the net effect of (i) increases in distribution revenue of $5.3 million and $17.2 million, respectively, associated with the September 2017 launch of our Swiss sports channels and (ii) decreases of $2.7 million and $6.4 million, respectively, due to the impact of unclaimed customer credit accruals that were released during the 2017 periods.

(d) The increases in residential mobile subscription revenue are primarily due to increases in the average number of mobile subscribers.

(e) The increases in B2B non-subscription revenue are primarily due to (i) increases in interconnect revenue and (ii) higher revenue from fixed-line telephony and data services.

Central and Eastern Europe. The details of the pro forma increases in Central and Eastern Europe's revenue during the three and six months ended June 30, 2018, as compared to the corresponding periods in 2017, are set forth below:

	Three-month period			Six-month period		
	Subscription revenue	Non-subscription revenue	Total	Subscription revenue	Non-subscription revenue	Total
	in millions					
Decrease in residential cable subscription revenue due to change in:						
Average number of RGUs (a)	$ (0.5)	$ —	$ (0.5)	$ (1.8)	$ —	$ (1.8)
ARPU (b)	(1.1)	—	(1.1)	(0.6)	—	(0.6)
Increase (decrease) in residential cable non-subscription revenue	—	0.4	0.4	—	(0.1)	(0.1)
Total increase (decrease) in residential cable revenue	(1.6)	0.4	(1.2)	(2.4)	(0.1)	(2.5)
Increase in B2B revenue (c)	1.2	0.4	1.6	2.7	1.7	4.4
Total organic increase (decrease)	(0.4)	0.8	0.4	0.3	1.6	1.9
Impact of FX	10.3	0.4	10.7	33.1	2.1	35.2
Total	$ 9.9	$ 1.2	$ 11.1	$ 33.4	$ 3.7	$ 37.1

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(a) The decreases in residential cable subscription revenue related to changes in the average number of RGUs are primarily attributable to the net effect of (i) decreases in the average number of video RGUs, primarily in UPC DTH and Poland, and (ii) increases in the average number of broadband internet RGUs.

(b) The decreases in residential cable subscription revenue related to changes in ARPU are primarily attributable to the net effect of (i) lower ARPU from fixed-line telephony services, primarily in Poland, and (ii) for the six-month comparison, (a) higher ARPU from video services, primarily in Poland and UPC DTH, and (b) lower ARPU from broadband internet services, primarily in Poland.

(c) The increases in B2B subscription revenue are attributable to increases in the average number of broadband internet SOHO subscribers.

Programming and Other Direct Costs of Services, Other Operating Expenses and SG&A Expenses of our Consolidated Reportable Segments

For information regarding the changes in our (i) programming and other direct costs of services, (ii) other operating expenses and (iii) SG&A expenses, see *Discussion and Analysis of our Consolidated Operating Results* below.

Adjusted OIBDA of our Consolidated Reportable Segments

General. Adjusted OIBDA is the primary measure used by our chief operating decision maker to evaluate segment operating performance. For the definition of this performance measure and for a reconciliation of Adjusted OIBDA from continuing operations to earnings (loss) from continuing operations before income taxes, see note 16 to our condensed consolidated financial statements.

	Three months ended June 30,		Increase (decrease)		Organic increase (decrease)	
	2018	2017 pro forma	$	%	$	%
	in millions, except percentages					
U.K./Ireland	$ 763.6	$ 701.0	$ 62.6	8.9	$ 15.8	2.4
Belgium	383.7	316.7	67.0	21.2	29.4	9.1
Switzerland	189.0	212.4	(23.4)	(11.0)	(23.4)	(11.0)
Central and Eastern Europe	67.9	64.8	3.1	4.8	(2.1)	(2.5)
Central and Corporate	(83.6)	(98.7)	15.1	15.3	20.7	20.9
Intersegment eliminations	(10.8)	(8.4)	(2.4)	N.M.	(2.4)	N.M.
Total	$ 1,309.8	$ 1,187.8	$ 122.0	10.3	$ 38.0	3.2

	Six months ended June 30,		Increase (decrease)		Organic increase (decrease)	
	2018	2017 pro forma	$	%	$	%
	in millions, except percentages					
U.K./Ireland	$ 1,526.2	$ 1,343.9	$ 182.3	13.6	$ 51.3	3.9
Belgium	741.3	613.2	128.1	20.9	36.7	5.9
Switzerland	375.5	416.1	(40.6)	(9.8)	(51.0)	(12.3)
Central and Eastern Europe	139.8	123.1	16.7	13.6	0.6	0.8
Central and Corporate	(182.7)	(191.7)	9.0	4.7	23.1	12.0
Intersegment eliminations	(18.5)	(16.2)	(2.3)	N.M.	(2.3)	N.M.
Total	$ 2,581.6	$ 2,288.4	$ 293.2	12.8	$ 58.4	2.5

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N.M. — Not Meaningful.

Adjusted OIBDA Margin

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

	Three months ended June 30,		**Six months ended June 30,**	
	2018	**2017**	**2018**	**2017**
		pro forma		**pro forma**
U.K./Ireland	44.0%	44.8%	43.5%	43.8%
Belgium	50.9%	46.2%	49.0%	45.6%
Switzerland	56.9%	62.7%	55.5%	62.2%
Central and Eastern Europe	44.4%	45.6%	44.6%	44.6%

In addition to organic changes in the revenue, operating and SG&A expenses of our consolidated reportable segments, the Adjusted OIBDA margins presented above include the impact of acquisitions. For discussion of the factors contributing to the changes in the Adjusted OIBDA margins of our reportable segments, see the analysis of our revenue included in *Discussion and Analysis of our Reportable Segments* above and the analysis of our expenses included in *Discussion and Analysis of our Consolidated Operating Results* below.

Discussion and Analysis of our Consolidated Operating Results

Revenue

Our revenue by major category is set forth below:

	Three months ended June 30,		Increase		Organic increase (decrease)	
	2018	2017	$	%	$	%
		pro forma				
	in millions, except percentages					
Residential revenue:						
Residential cable revenue (a):						
Subscription revenue (b):						
Video	$ 743.5	$ 721.9	$ 21.6	3.0	$ (26.5)	(3.6)
Broadband internet	816.7	729.3	87.4	12.0	36.2	4.9
Fixed-line telephony	407.7	399.6	8.1	2.0	(18.3)	(4.6)
Total subscription revenue	1,967.9	1,850.8	117.1	6.3	(8.6)	(0.5)
Non-subscription revenue	72.4	62.5	9.9	15.8	7.5	11.9
Total residential cable revenue	2,040.3	1,913.3	127.0	6.6	(1.1)	(0.1)
Residential mobile revenue (c):						
Subscription revenue (b)	249.6	240.3	9.3	3.9	(2.7)	(1.1)
Non-subscription revenue	175.2	137.6	37.6	27.3	29.8	22.2
Total residential mobile revenue	424.8	377.9	46.9	12.4	27.1	7.3
Total residential revenue	2,465.1	2,291.2	173.9	7.6	26.0	1.1
B2B revenue (d):						
Subscription revenue	102.9	91.4	11.5	12.6	3.9	4.3
Non-subscription revenue	400.2	337.5	62.7	18.6	25.5	7.3
Total B2B revenue	503.1	428.9	74.2	17.3	29.4	6.7
Other revenue (e)	76.9	50.8	26.1	51.4	22.7	44.7
Total	$ 3,045.1	$ 2,770.9	$ 274.2	9.9	$ 78.1	2.8

	Six months ended June 30,		Increase		Organic increase (decrease)	
	2018	2017	$	%	$	%
		pro forma				
			in millions, except percentages			
Residential revenue:						
Residential cable revenue (a):						
Subscription revenue (b):						
Video	$ 1,518.1	$ 1,415.4	$ 102.7	7.3	$ (39.2)	(2.7)
Broadband internet	1,657.9	1,439.9	218.0	15.1	69.5	4.8
Fixed-line telephony	829.7	794.7	35.0	4.4	(40.4)	(5.1)
Total subscription revenue	4,005.7	3,650.0	355.7	9.7	(10.1)	(0.3)
Non-subscription revenue	154.1	129.5	24.6	19.0	16.8	13.1
Total residential cable revenue	4,159.8	3,779.5	380.3	10.1	6.7	0.2
Residential mobile revenue (c):						
Subscription revenue (b)	493.4	469.9	23.5	5.0	(11.1)	(2.4)
Non-subscription revenue	354.7	267.5	87.2	32.6	61.6	23.6
Total residential mobile revenue	848.1	737.4	110.7	15.0	50.5	7.0
Total residential revenue	5,007.9	4,516.9	491.0	10.9	57.2	1.3
B2B revenue (d):						
Subscription revenue	219.6	168.8	50.8	30.1	28.9	17.1
Non-subscription revenue	771.4	652.0	119.4	18.3	35.4	5.3
Total B2B revenue	991.0	820.8	170.2	20.7	64.3	7.7
Other revenue (e)	140.7	98.2	42.5	43.3	27.4	27.7
Total	$ 6,139.6	$ 5,435.9	$ 703.7	12.9	$ 148.9	2.7

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(a) Residential cable subscription revenue includes amounts received from subscribers for ongoing services and the recognition of deferred installation revenue over the associated contract period. Residential cable non-subscription revenue includes, among other items, channel carriage fees, late fees and revenue from the sale of equipment.

(b) Residential 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.

(c) Residential mobile subscription revenue includes amounts received from subscribers for ongoing services. Residential mobile non-subscription revenue includes, among other items, interconnect revenue and revenue from sales of mobile handsets and other devices. Residential mobile interconnect revenue was $67.4 million and $66.4 million during the three months ended June 30, 2018 and 2017, respectively, and $137.3 million and $129.9 million during the six months ended June 30, 2018 and 2017, respectively.

(d) B2B subscription revenue represents revenue from 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. A portion of the increases in our B2B subscription revenue is attributable to the conversion of certain residential subscribers to SOHO subscribers. B2B non-subscription revenue includes revenue from business broadband internet, video, fixed-line telephony, mobile and data services offered to medium to large enterprises and, on a wholesale basis, to other operators.

(e) Other revenue includes, among other items, revenue earned from the JV Services, broadcasting revenue in Ireland and revenue from Central and Corporate's wholesale handset program. In addition, the 2018 periods include revenue earned from (i) sales of customer premises equipment to the VodafoneZiggo JV and (ii) services provided to Liberty Latin America.

Total revenue. Our consolidated revenue increased $274.2 million or 9.9% and $703.7 million or 12.9% during the three and six months ended June 30, 2018, respectively, as compared to the corresponding periods in 2017. These increases include (i) increases of $21.7 million and $38.1 million, respectively, attributable to the impact of acquisitions and (ii) decreases of $5.4 million and $13.4 million, respectively, attributable to the impact of dispositions. On an organic basis, our consolidated revenue increased $78.1 million or 2.8% and $148.9 million or 2.7% during the three and six months ended June 30, 2018, respectively, as compared to the corresponding periods in 2017.

Residential revenue. The details of the pro forma increases in our consolidated residential revenue for the three and six months ended June 30, 2018, as compared to the corresponding periods in 2017, are as follows:

	Three-month period	Six-month period
	in millions	
Increase (decrease) in residential cable subscription revenue due to change in:		
Average number of RGUs	$ 6.7	$ (7.6)
ARPU	(15.3)	(2.5)
Increase in residential cable non-subscription revenue	7.5	16.8
Total increase (decrease) in residential cable revenue	(1.1)	6.7
Decrease in residential mobile subscription revenue	(2.7)	(11.1)
Increase in residential mobile non-subscription revenue	29.8	61.6
Total organic increase in residential revenue	26.0	57.2
Net impact of acquisitions and disposals	5.4	7.3
Impact of FX	142.5	426.5
Total increase in residential revenue	$ 173.9	$ 491.0

On an organic basis, our consolidated residential cable subscription revenue decreased $8.6 million or 0.5% and $10.1 million or 0.3% during the three and six months ended June 30, 2018, respectively, as compared to the corresponding periods in 2017. These decreases are attributable to the net effect of (i) increases from broadband internet services of $36.2 million or 4.9% and $69.5 million or 4.8%, respectively, attributable to higher ARPU and increases in the average number of RGUs, (ii) decreases from fixed-line telephony services of $18.3 million or 4.6% and $40.4 million or 5.1%, respectively, attributable to the net effect of lower ARPU and, in the three-month comparison, an increase in the average number of RGUs and (iii) decreases from video services of $26.5 million or 3.6% and $39.2 million or 2.7%, respectively, primarily attributable to lower ARPU and decreases in the average number of RGUs.

On an organic basis, our consolidated residential cable non-subscription revenue increased $7.5 million or 11.9% and $16.8 million or 13.1% during the three and six months ended June 30, 2018, respectively, as compared to the corresponding periods in 2017. These increases are primarily attributable to increases in Switzerland that were only partially offset by decreases in Belgium.

On an organic basis, our consolidated residential mobile subscription revenue decreased $2.7 million or 1.1% and $11.1 million or 2.4% during the three and six months ended June 30, 2018, respectively, as compared to the corresponding periods in 2017. These decreases are primarily due to declines in Belgium and the U.K. that were only partially offset by increases in Switzerland.

On an organic basis, our consolidated residential mobile non-subscription revenue increased $29.8 million or 22.2% and $61.6 million or 23.6% during the three and six months ended June 30, 2018, respectively, as compared to the corresponding periods in 2017. These increases are primarily due to increases in handset sales in the U.K.

B2B revenue. On an organic basis, our consolidated B2B subscription revenue increased $3.9 million or 4.3% and $28.9 million or 17.1% during the three and six months ended June 30, 2018, respectively, as compared to the corresponding periods in 2017. These increases are primarily due to increases in SOHO revenue in the U.K. and Belgium.

On an organic basis, our consolidated B2B non-subscription revenue increased $25.5 million or 7.3% and $35.4 million or 5.3% during the three and six months ended June 30, 2018, respectively, as compared to the corresponding periods in 2017. These increases are primarily due to increases in Belgium and Switzerland.

Other revenue. On an organic basis, our consolidated other revenue increased $22.7 million or 44.7% and $27.4 million or 27.7% during the three and six months ended June 30, 2018, respectively, as compared to the corresponding periods in 2017. These increases are primarily due to (i) $18.2 million in revenue earned from the sale of customer premises equipment to the VodafoneZiggo JV, which began during the second quarter of 2018, and (ii) increases in broadcasting revenue in Ireland.

For additional information concerning the changes in our residential, B2B and other revenue, see *Discussion and Analysis of our Reportable Segments* above.

Programming and other direct costs of services

Programming and other direct costs of services include programming and copyright costs, interconnect and access costs, costs of mobile handsets and other devices and other direct costs related to our operations. Programming and copyright costs, which represent a significant portion of our operating costs, are expected to rise in future periods as a result of (i) higher costs associated with the expansion of our digital video content, including rights associated with ancillary product offerings and rights that provide for the broadcast of live sporting events, (ii) rate increases and (iii) growth in the number of our enhanced video subscribers.

	Three months ended June 30,		Increase (decrease)		Organic increase (decrease)	
	2018	2017	$	%	$	%
		pro forma				
	in millions, except percentages					
U.K./Ireland	$ 513.5	$ 437.4	$ 76.1	17.4	$ 44.7	10.2
Belgium	168.1	177.3	(9.2)	(5.2)	(23.8)	(13.3)
Switzerland	61.9	43.6	18.3	42.0	18.3	42.0
Central and Eastern Europe	42.6	36.9	5.7	15.4	2.6	7.0
Central and Corporate	32.2	9.4	22.8	242.6	21.4	227.7
Intersegment eliminations	(0.3)	—	(0.3)	N.M.	(0.3)	N.M.
Total	$ 818.0	$ 704.6	$ 113.4	16.1	$ 62.9	8.9

	Six months ended June 30,		Increase (decrease)		Organic increase (decrease)	
	2018	2017	$	%	$	%
		pro forma				
	in millions, except percentages					
U.K./Ireland	$ 1,066.7	$ 885.8	$ 180.9	20.4	$ 87.6	9.9
Belgium	348.7	355.8	(7.1)	(2.0)	(44.1)	(12.4)
Switzerland	132.1	85.2	46.9	55.0	43.1	50.6
Central and Eastern Europe	84.9	72.4	12.5	17.3	3.2	4.4
Central and Corporate	44.8	18.2	26.6	146.2	23.1	126.9
Intersegment eliminations	0.2	0.7	(0.5)	N.M.	(0.5)	N.M.
Total	$ 1,677.4	$ 1,418.1	$ 259.3	18.3	$ 112.4	7.9

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N.M. — Not Meaningful.

Our programming and other direct costs of services increased $113.4 million or 16.1% and $259.3 million or 18.3% during the three and six months ended June 30, 2018, respectively, as compared to the corresponding periods in 2017. These increases include (i) increases of $5.6 million and $7.9 million, respectively, attributable to the impact of acquisitions and (ii) decreases of $3.7 million and $7.6 million, respectively, attributable to the impact of dispositions. On an organic basis, our programming and other direct costs of services increased $62.9 million or 8.9% and $112.4 million or 7.9% during the three and six months ended June 30, 2018, respectively, as compared to the corresponding periods in 2017. These increases includes the following factors:

- Increases in mobile handset and other device costs of $16.8 million or 21.7% and $50.0 million or 34.2%, respectively, primarily due to (i) higher average cost per handset sold in U.K./Ireland and (ii) higher mobile handset and other device sales volumes, primarily due to increases in Central and Corporate and U.K./Ireland, that were only partially offset by decreases in Belgium. Substantially all of the increases in Central and Corporate are attributable to its wholesale handset program;

- Increases in programming and copyright costs of $11.2 million or 3.0% and $42.4 million or 5.7%, respectively, primarily due to increases in Switzerland and U.K./Ireland. These increases are primarily due to (i) higher costs for certain premium and/or basic content, including higher costs associated with (a) sports rights in Switzerland and (b) for the six-month comparison, broadcasting rights in Ireland, (ii) growth in the number of enhanced video subscribers, primarily due to increases in U.K./Ireland, and (iii) higher costs in Central and Eastern Europe due to a $2.6 million accrual during the second quarter of 2018 following the reassessment of an operational contingency. The cost for sports rights in Switzerland increased by $9.4 million and $28.6 million, respectively, due to the acquisition of the rights to carry live sporting events in connection with the September 2017 launch of our Swiss sports channels. Approximately half of the annual programming costs and the operating and capital costs associated with the production of the related Swiss sports channels are recovered from the revenue earned from the distribution of these sports channels to other cable operators;

- Higher costs of sales of $17.2 million during each period in Central and Corporate related to customer premises equipment sold to the VodafoneZiggo JV;

- Decreases of $3.2 million and $6.8 million, respectively, in the U.K. associated with the fourth quarter 2017 modification of a software agreement that resulted in the acquisition of a perpetual license and related conversion of the operating costs to capitalized costs; and

- Increases in interconnect and access costs of $20.8 million or 10.4% and $5.7 million or 1.4%, respectively, primarily due to the net effect of (i) lower MVNO costs, as decreases in Belgium of $15.6 million and $29.2 million, respectively, were only partially offset by increases in Switzerland, (ii) higher costs of $23.8 million in U.K./Ireland during each period resulting from the net impact of credits recorded during the second quarter of 2017 ($28.8 million) and the second quarter of 2018 ($5.0 million) in connection with a telecommunications operator's agreement to compensate communications providers, including Virgin Media, for certain contractual breaches related to network charges and (iii) higher interconnect and roaming costs, primarily due to the net effect of (a) increases in U.K./Ireland and Switzerland and (b) for the six-month comparison, a decrease in Belgium. The lower MVNO costs in Belgium are primarily attributable to the impact of the migration of mobile subscribers from Telenet's MVNO arrangement to Telenet's mobile network, which was completed during the first quarter of 2018. For additional information, see note 13 to our condensed consolidated financial statements.

Other operating expenses

Other operating expenses include network operations, customer operations, customer care, share-based compensation and other costs related to our operations. We do not include share-based compensation in the following discussion and analysis of the other operating expenses of our reportable segments as share-based compensation expense is not included in the performance measures of our reportable segments. Share-based compensation expense is discussed below.

	Three months ended June 30,		Increase (decrease)		Organic increase (decrease)	
	2018	2017	$	%	$	%
		pro forma				
	in millions, except percentages					
U.K./Ireland	$ 227.9	$ 206.5	$ 21.4	10.4	$ 10.1	4.9
Belgium	98.2	91.3	6.9	7.6	(2.9)	(3.1)
Switzerland	37.4	41.8	(4.4)	(10.5)	(4.3)	(10.3)
Central and Eastern Europe	21.8	20.0	1.8	9.0	1.2	6.0
Central and Corporate	40.1	40.7	(0.6)	(1.5)	(4.7)	(11.5)
Intersegment eliminations	5.8	7.6	(1.8)	N.M.	(1.8)	N.M.
Total other operating expenses excluding share-based compensation expense	431.2	407.9	23.3	5.7	$ (2.4)	(0.6)
Share-based compensation expense	—	0.9	(0.9)	(100.0)		
Total	$ 431.2	$ 408.8	$ 22.4	5.5		

	Six months ended June 30,		Increase (decrease)		Organic increase (decrease)	
	2018	2017	$	%	$	%
		pro forma				
	in millions, except percentages					
U.K./Ireland	$ 459.9	$ 402.4	$ 57.5	14.3	$ 17.5	4.3
Belgium	211.5	183.8	27.7	15.1	0.4	0.2
Switzerland	81.2	83.3	(2.1)	(2.5)	(4.7)	(5.6)
Central and Eastern Europe	46.5	42.0	4.5	10.7	(0.5)	(1.2)
Central and Corporate	84.1	79.7	4.4	5.5	(3.8)	(4.8)
Intersegment eliminations	15.0	13.1	1.9	N.M.	1.9	N.M.
Total other operating expenses excluding share-based compensation expense	898.2	804.3	93.9	11.7	$ 10.8	1.3
Share-based compensation expense	1.0	1.9	(0.9)	(47.4)		
Total	$ 899.2	$ 806.2	$ 93.0	11.5		

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N.M. — Not Meaningful.

Our other operating expenses (exclusive of share-based compensation expense) increased $23.3 million or 5.7% and $93.9 million or 11.7% during the three and six months ended June 30, 2018, respectively, as compared to the corresponding periods in 2017. These increases include increases of $2.3 million and $4.7 million, respectively, attributable to the impact of acquisitions. On an organic basis, our other operating expenses increased (decreased) ($2.4 million) or (0.6%) and $10.8 million or 1.3% during the three and six months ended June 30, 2018, respectively, as compared to the corresponding periods in 2017. These changes include the following factors:

- Increases in network infrastructure charges in U.K./Ireland of $4.6 million and $13.0 million, respectively, following an increase in the rateable value of existing assets. For additional information, including our estimate of the full year

2018 impact of this rate increase, see "*Other Regulatory Issues*" in note 15 to our condensed consolidated financial statements;

- Decreases in business service costs of $2.7 million or 5.1% and $6.3 million or 6.4%, respectively, primarily due to (i) decreased vehicle expenses due to the impact of the conversion of certain operating leases on company vehicles to capital leases in Belgium and U.K./Ireland, (ii) for the six-month comparison, lower energy costs and (iii) decreases in travel and entertainment expenses; and

- Decreases in personnel costs of $9.2 million or 7.8% and $2.2 million or 0.9%, respectively, primarily due to the net effect of (i) lower staffing levels, as decreases in U.K./Ireland, Belgium and Switzerland were only partially offset by increases in Central and Corporate, and (ii) higher incentive compensation costs in U.K./Ireland.

SG&A expenses

SG&A expenses include human resources, information technology, general services, management, finance, legal, sales and marketing, share-based compensation and other general expenses. We do not include share-based compensation in the following discussion and analysis of the SG&A expenses of our reportable segments as share-based compensation expense is not included in the performance measures of our reportable segments. Share-based compensation expense is discussed below.

	Three months ended June 30,		Increase (decrease)		Organic increase (decrease)	
	2018	2017	$	%	$	%
		pro forma				
	in millions, except percentages					
U.K./Ireland	$ 229.9	$ 218.9	$ 11.0	5.0	$ (6.3)	(2.9)
Belgium	103.9	99.5	4.4	4.4	(7.9)	(7.6)
Switzerland	43.9	40.9	3.0	7.3	2.9	7.1
Central and Eastern Europe	20.6	20.1	0.5	2.5	(1.3)	(6.5)
Central and Corporate	83.3	91.3	(8.0)	(8.8)	(12.4)	(13.6)
Intersegment eliminations	4.5	(0.1)	4.6	N.M.	4.6	N.M.
Total SG&A expenses excluding share-based compensation expense	486.1	470.6	15.5	3.3	$ (20.4)	(4.3)
Share-based compensation expense	45.5	50.5	(5.0)	(9.9)		
Total	$ 531.6	$ 521.1	$ 10.5	2.0		

	Six months ended June 30,		Increase		Organic increase (decrease)	
	2018	2017	$	%	$	%
		pro forma				
	in millions, except percentages					
U.K./Ireland	$ 460.3	$ 434.2	$ 26.1	6.0	$ (14.0)	(3.2)
Belgium	212.0	192.0	20.0	10.4	(8.3)	(4.2)
Switzerland	88.3	84.4	3.9	4.6	1.3	1.5
Central and Eastern Europe	42.2	38.8	3.4	8.8	(1.4)	(3.6)
Central and Corporate	177.6	177.3	0.3	0.2	(13.9)	(7.8)
Intersegment eliminations	2.0	(1.6)	3.6	N.M.	3.6	N.M.
Total SG&A expenses excluding share-based compensation expense	982.4	925.1	57.3	6.2	$ (32.7)	(3.5)
Share-based compensation expense	87.2	78.4	8.8	11.2		
Total	$ 1,069.6	$ 1,003.5	$ 66.1	6.6		

N.M. — Not Meaningful.

Supplemental SG&A expense information:

	Three months ended June 30,		Increase (decrease)		Organic decrease	
	2018	**2017**	**$**	**%**	**$**	**%**
		pro forma				
	in millions, except percentages					
General and administrative (a)	$ 386.7	$ 367.6	$ 19.1	5.2	$ (9.6)	(2.6)
External sales and marketing	99.4	103.0	(3.6)	(3.5)	(10.8)	(10.4)
Total	$ 486.1	$ 470.6	$ 15.5	3.3	$ (20.4)	(4.3)

	Six months ended June 30,		Increase (decrease)		Organic decrease	
	2018	**2017**	**$**	**%**	**$**	**%**
		pro forma				
	in millions, except percentages					
General and administrative (a)	$ 779.3	$ 718.2	$ 61.1	8.5	$ (8.0)	(1.1)
External sales and marketing	203.1	206.9	(3.8)	(1.8)	(24.7)	(11.9)
Total	$ 982.4	$ 925.1	$ 57.3	6.2	$ (32.7)	(3.5)

(a) General and administrative expenses include all personnel-related costs within our SG&A expenses, including personnel-related costs associated with our sales and marketing function.

Our SG&A expenses (exclusive of share-based compensation expense) increased $15.5 million or 3.3% and $57.3 million or 6.2% during the three and six months ended June 30, 2018, respectively, as compared to the corresponding periods in 2017. These increases include increases of $4.2 million and $6.0 million, respectively, attributable to the impact of acquisitions. On an organic basis, our SG&A expenses decreased $20.4 million or 4.3% and $32.7 million or 3.5% during the three and six months ended June 30, 2018, respectively, as compared to the corresponding periods in 2017. These decreases include the following factors:

- Decreases in external sales and marketing costs of $9.3 million or 7.8% and $21.6 million or 9.0%, respectively, primarily due to lower costs associated with advertising campaigns in U.K./Ireland and, for the three-month comparison, Belgium;

- Decreases in personnel costs of $8.8 million or 4.4% and $18.0 million or 4.5%, respectively, primarily due to the net effect of (i) lower incentive compensation costs, primarily in Central and Corporate, (ii) a higher average cost per employee, primarily due to increases in U.K./Ireland that were only partially offset by decreases in Central and Corporate, (iii) lower staffing levels, as decreases in U.K./Ireland were only partially offset by increases in Central and Corporate, and (iv) decreases in temporary personnel costs, primarily in Central and Corporate and U.K./Ireland. The lower incentive compensation costs include decreases of $12.7 million and $19.4 million, respectively, primarily in Central and Corporate, attributable to the expected settlement of a portion of our 2018 annual incentive compensation with Liberty Global ordinary shares through a shareholding incentive program that was implemented in 2018. For additional information, see note 12 to our condensed consolidated financial statements;

- Increases in core network and information technology-related costs of $5.2 million or 11.8% and $11.4 million or 13.8%, respectively, primarily due to increases in information technology-related expenses in Central and Corporate and, for the six-month comparison, U.K./Ireland; and

- Decreases in business service and certain other costs of $1.6 million or 3.0% and $5.3 million or 5.4%, respectively, primarily due to the net effect of (i) an increase of $6.4 million during each period due to the reassessment of an accrual

in U.K./Ireland, (ii) lower consulting costs, primarily due to decreases in Belgium and U.K./Ireland, and (iii) decreases in travel and entertainment expenses in Central and Corporate.

Share-based compensation expense (included in other operating and SG&A expenses)

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

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in millions			
Liberty Global:				
Performance-based incentive awards (a)	$ 8.0	$ 19.1	$ 16.7	$ 19.8
Non-performance based share-based incentive awards	24.3	24.6	46.3	46.3
Other (b)	13.4	—	20.5	—
Total Liberty Global	45.7	43.7	83.5	66.1
Other	(0.2)	7.7	4.7	14.2
Total	$ 45.5	$ 51.4	$ 88.2	$ 80.3
Included in:				
Other operating expense	$ —	$ 0.9	$ 1.0	$ 1.9
SG&A expense	45.5	50.5	87.2	78.4
Total	$ 45.5	$ 51.4	$ 88.2	$ 80.3

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(a) Includes share-based compensation expense related to (i) PSUs and (ii) through March 31, 2017, PGUs held by our Chief Executive Officer.

(b) Represents annual incentive compensation and defined contribution plan liabilities that have been or are expected to be settled with Liberty Global ordinary shares. In the case of the annual incentive compensation, shares will be issued to senior management and key employees pursuant to a shareholding incentive program that was implemented in 2018. The shareholding incentive program allows these employees to elect to receive up to 100% of their annual incentive compensation in ordinary shares of Liberty Global in lieu of cash.

For additional information regarding our share-based compensation expense, see note 12 to our condensed consolidated financial statements.

Depreciation and amortization expense

Our depreciation and amortization expense was $970.2 million and $2,017.5 million for the three and six months ended June 30, 2018, respectively, and $922.0 million and $1,789.7 million for the three and six months ended June 30, 2017, respectively. Excluding the effects of FX, depreciation and amortization expense increased (decreased) ($11.5 million) or (1.2%) and $48.5 million or 2.7% during the three and six months ended June 30, 2018, respectively, as compared to the corresponding periods in 2017. These changes are primarily due to the net effect of (i) increases associated with property and equipment additions related to the installation of customer premises equipment, the expansion and upgrade of our networks and other capital initiatives, (ii) decreases associated with certain assets becoming fully depreciated, primarily in U.K./Ireland, Central and Corporate and Switzerland, and (iii) decreases in accelerated depreciation in Belgium.

Impairment, restructuring and other operating items, net

We recognized impairment, restructuring and other operating items, net, of $30.2 million and $91.6 million during the three and six months ended June 30, 2018, respectively, and $13.1 million and $6.4 million during the three and six months ended June 30, 2017, respectively.

The amounts for the three- and six-month periods in 2018 primarily include restructuring charges of $14.8 million and $68.5

million, respectively, including (i) $39.2 million during the six-month period related to Belgium's migration of Telenet's mobile subscribers from an MVNO arrangement to Telenet's mobile network and (ii) $10.3 million and $22.2 million, respectively, of employee severance and termination costs related to certain reorganization activities, primarily in U.K./Ireland and Central and Corporate. For additional information regarding Telenet's exit from its MVNO arrangement, see note 13 to our condensed consolidated financial statements.

The amounts for the three- and six-month periods in 2017 include restructuring charges of $14.0 million and $20.1 million, respectively, including $11.2 million and $15.9 million, respectively, of employee severance and termination costs related to certain reorganization activities, primarily in U.K./Ireland and Central and Corporate.

If, among other factors, (i) our equity values were to decline 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.

For additional information regarding our restructuring charges, see note 13 to our condensed consolidated financial statements.

Interest expense

We recognized interest expense of $381.1 million and $757.0 million during the three and six months ended June 30, 2018, respectively, and $348.8 million and $688.3 million during the three and six months ended June 30, 2017, respectively. Excluding the effects of FX, interest expense increased $9.6 million or 2.8% and $4.7 million or 0.7% during the three and six months ended June 30, 2018, respectively, as compared to the corresponding periods in 2017. These increases are primarily attributable to slightly higher average outstanding debt balances. For additional information regarding our outstanding indebtedness, see note 9 to our condensed consolidated financial statements.

It is possible that the interest rates on (i) any new borrowings could be higher than the current interest rates on our existing indebtedness and (ii) our variable-rate indebtedness could increase in future periods. As further discussed in note 6 to our condensed consolidated financial statements and under *Qualitative and Quantitative Disclosures about Market Risk* below, we use derivative instruments to manage our interest rate risks.

Realized and unrealized gains (losses) on derivative instruments, net

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

	Three months ended June 30,		**Six months ended June 30,**	
	2018	**2017**	**2018**	**2017**
	in millions			
Cross-currency and interest rate derivative contracts (a)	$ 870.1	$ (502.3)	$ 508.2	$ (659.1)
Equity-related derivative instruments:				
ITV Collar	(183.6)	163.4	(60.0)	110.2
Lionsgate Forward	3.4	(2.5)	12.4	(2.0)
Sumitomo Collar	(23.2)	2.2	(11.8)	(21.3)
Other	1.0	0.4	2.2	(5.4)
Total equity-related derivative instruments (b)	(202.4)	163.5	(57.2)	81.5
Foreign currency forward and option contracts	8.3	(12.9)	13.9	(19.0)
Other	(0.5)	—	(0.7)	0.5
Total	$ 675.5	$ (351.7)	$ 464.2	$ (596.1)

(a) The gains during the 2018 periods are primarily attributable to the net effect of (i) net gains associated with changes in the relative value of certain currencies and (ii) net losses associated with changes in certain market interest rates. In addition, the gains during the 2018 periods include net losses of $65.6 million and $27.9 million, respectively, resulting from changes in our credit risk valuation adjustments. The losses during the 2017 periods are primarily attributable to the net effect of (a) net losses associated with changes in the relative value of certain currencies and (b) net gains associated with changes in certain market interest rates. In addition, the losses during the 2017 periods include net gains of $59.6 million and $109.0 million, respectively, resulting from changes in our credit risk valuation adjustments.

(b) The recurring fair value measurements of our equity-related derivative instruments are based on Black-Scholes pricing models.

For additional information concerning our derivative instruments, see notes 6 and 7 to our condensed consolidated financial statements and *Quantitative and Qualitative Disclosures about Market Risk* below.

Foreign currency transaction gains (losses), net

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

	Three months ended June 30,		**Six months ended June 30,**	
	2018	**2017**	**2018**	**2017**
	in millions			
Intercompany payables and receivables denominated in a currency other than the entity's functional currency (a)	$ 450.5	$ (348.1)	$ 158.8	$ (349.8)
U.S. dollar-denominated debt issued by euro functional currency entities	(228.9)	267.0	(133.9)	313.0
U.S. dollar-denominated debt issued by British pound sterling functional currency entities	(271.4)	126.8	(99.3)	196.4
British pound sterling-denominated debt issued by a U.S. dollar functional currency entity	87.9	(49.6)	35.3	(70.5)
Cash and restricted cash denominated in a currency other than the entity's functional currency	13.4	(42.4)	(5.4)	(82.5)
Other	0.6	28.1	(5.1)	4.4
Total	$ 52.1	$ (18.2)	$ (49.6)	$ 11.0

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

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

Our realized and unrealized gains or losses due to changes in fair values of certain investments and debt include unrealized gains or losses associated with changes in fair values that are non-cash in nature until such time as these gains or losses are realized through cash transactions. For additional information regarding our investments, fair value measurements and debt, see notes 5, 7 and 9, respectively, to our condensed consolidated financial statements. The details of our realized and unrealized gains (losses) due to changes in fair values of certain investments and debt, net, are as follows:

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in millions			
Investments:				
Lionsgate	$ (4.1)	$ 8.9	$ (43.2)	$ 7.6
Sumitomo	(8.9)	(20.1)	(17.2)	55.7
ITV	109.7	(153.7)	22.9	(75.0)
Casa	(51.0)	4.2	1.2	5.9
Other, net	8.5	7.3	11.5	15.4
Total investments	54.2	(153.4)	(24.8)	9.6
Debt	7.3	12.0	29.1	(52.2)
Total	$ 61.5	$ (141.4)	$ 4.3	$ (42.6)

Losses on debt modification and extinguishment, net

We recognized net losses on debt modification and extinguishment of $20.1 million and $53.6 million during the three months ended June 30, 2018 and 2017, respectively, and $22.7 million and $98.9 million during the six months ended June 30, 2018 and 2017, respectively.

The loss during the six months ended June 30, 2018 is primarily attributable to (i) the payment of $19.3 million of redemption premiums (including $17.3 million during the second quarter), (ii) the write-off of $12.2 million of net unamortized deferred financing costs and discounts (including $11.6 million during the second quarter) and (iii) the settlement of the the final tranche of the Sumitomo Collar, as described in note 6 to our condensed consolidated financial statements.

The loss during the six months ended June 30, 2017 is primarily attributable to (i) the payment of $54.1 million of redemption premiums (including $21.5 million during the second quarter) and (ii) the write-off of $45.1 million of net unamortized deferred financing costs, discounts and premiums (including $33.7 million during the second quarter).

For additional information concerning our losses on debt modification and extinguishment, net, see note 9 to our condensed consolidated financial statements.

Share of losses of affiliates, net

The following table sets forth the details of our share of losses of affiliates, net:

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in millions			
VodafoneZiggo JV (a)	$ (63.2)	$ 6.5	$ (90.0)	$ 5.2
Other	(19.1)	(10.1)	(28.8)	(24.5)
Total	$ (82.3)	$ (3.6)	$ (118.8)	$ (19.3)

(a) Amounts include the net effect of (i) interest income of $15.0 million, $15.8 million, $30.2 million and $30.6 million, respectively, representing 100% of the interest earned on the VodafoneZiggo JV Receivable, (ii) 100% of the share-based compensation expense associated with Liberty Global awards held by VodafoneZiggo JV employees who were formerly employees of Liberty Global, as these awards remain our responsibility, and (iii) our 50% share of the remaining results of operations of the VodafoneZiggo JV. The summarized results of operations of the VodafoneZiggo JV are set forth below:

	Three months ended June 30,		Six months ended June 30,	
	2018	2017 (1)	2018	2017 (1)
	in millions			
Revenue	$ 1,114.5	$ 1,077.9	$ 2,296.1	$ 2,150.0
Adjusted OIBDA	$ 483.6	$ 471.0	$ 985.5	$ 932.7
Operating income (loss)	$ (6.1)	$ 50.8	$ 17.6	$ 109.7
Non-operating expense (2)	$ 195.1	$ 76.7	$ 337.5	$ 176.7
Net loss	$ (150.8)	$ (18.4)	$ (238.1)	$ (46.5)

(1) Amounts have been presented 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.

(2) Includes interest expense of $168.6 million, $158.0 million, $338.2 million and $311.4 million, respectively.

The VodafoneZiggo JV is experiencing significant competition. In particular, the mobile operations of the VodafoneZiggo JV continue to experience competitive pressure on pricing, characterized by aggressive promotion campaigns, heavy marketing efforts and increasing or unlimited data bundles. In light of this competition, as well as regulatory and economic factors, we could conclude in future periods that our investment in the VodafoneZiggo JV is impaired or management of the VodafoneZiggo JV could conclude that an impairment of the VodafoneZiggo JV goodwill and, to a lesser extent, long-lived assets, is required. Any such impairment of the VodafoneZiggo JV's goodwill or our investment in the VodafoneZiggo JV would be reflected as a component of share of results of affiliates, net, in our condensed consolidated statement of operations. Our share of any such impairment charges could be significant.

Other income, net

We recognized other income, net, of $6.4 million and $15.8 million for the three months ended June 30, 2018 and 2017, respectively, and $16.2 million and $32.4 million for the six months ended June 30, 2018 and 2017, respectively. Our other income, net, includes interest and dividend income of (i) $2.1 million and $9.1 million during the three-month periods, respectively, and (ii) $6.6 million and $22.7 million during the six-month periods, respectively.

Income tax expense

We recognized income tax benefit (expense) of $92.8 million and ($68.7 million) during the three months ended June 30, 2018 and 2017, respectively.

The income tax benefit during the three months ended June 30, 2018 differs from the expected income tax expense of $109.4 million (based on the U.K. statutory income tax rate of 19.0%) primarily due to the net positive impact of (i) a reduction in our estimated Mandatory Repatriation Tax and (ii) non-deductible or non-taxable foreign currency exchange results. The net positive impact of these items was partially offset by the net negative impact of (i) an increase in valuation allowances and (ii) certain permanent differences between the financial and accounting treatment of items associated with investments in subsidiaries .

The income tax expense during the three months ended June 30, 2017 differs from the expected income tax benefit of $133.3 million (based on the U.K. blended income tax rate of 19.25%) primarily due to the net negative impact of (i) an increase in valuation allowances and (ii) non-deductible or non-taxable foreign currency exchange results.

We recognized income tax expense of $617.2 million and $150.4 million during the six months ended June 30, 2018 and 2017, respectively.

The income tax expense during the six months ended June 30, 2018 differs from the expected income tax benefit of $15.0 million (based on the U.K. statutory income tax rate of 19.0%) primarily due to the net negative impact of (i) our estimated Mandatory Repatriation Tax and (ii) certain permanent differences between the financial and accounting treatment of items associated with investments in subsidiaries. The net negative impact of these items was partially offset by the net positive impact of (i) a decrease in valuation allowances and (ii) non-deductible or non-taxable foreign currency exchange results.

The income tax expense during the six months ended June 30, 2017 differs from the expected income tax benefit of $188.0 million (based on the U.K. blended income tax rate of 19.25%) primarily due to the net negative impact of (i) an increase in valuation allowances and (ii) non-deductible or non-taxable foreign currency exchange results.

For additional information concerning our income taxes, see note 10 to our condensed consolidated financial statements.

Earnings (loss) from continuing operations

During the three months ended June 30, 2018 and 2017, we reported earnings (losses) from continuing operations of $668.7 million and ($761.3 million), respectively, consisting of (i) operating income of $263.9 million and $208.9 million, respectively, (ii) net non-operating income (expense) of $312.0 million and ($901.5 million), respectively, and (iii) income tax benefit (expense) of $92.8 million and ($68.7 million), respectively.

During the six months ended June 30, 2018 and 2017, we reported losses from continuing operations of $696.3 million and $1,126.8 million, respectively, consisting of (i) operating income of $384.3 million and $425.4 million, respectively, (ii) net non-operating expense of $463.4 million and $1,401.8 million, respectively, and (iii) income tax expense of $617.2 million and $150.4 million, respectively.

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

Due largely to the fact that we seek to maintain our debt at levels that provide for attractive equity returns, as discussed below under *Material Changes in Financial Condition — Capitalization*, we expect that we will continue to report significant levels of interest expense for the foreseeable future. For information concerning our expectations with respect to trends that may affect certain aspects of our operating results in future periods, see the discussion under *Overview* above. For information concerning the reasons for changes in specific line items in our condensed consolidated statements of operations, see *Discussion and Analysis of our Reportable Segments* and *Discussion and Analysis of our Consolidated Operating Results* above.

Earnings from discontinued operations, net of taxes

We reported earnings from discontinued operations, net of taxes, of $281.8 million and $108.9 million during the three months ended June 30, 2018 and 2017, respectively, and $468.2 million and $207.2 million during the six months ended June 30, 2018 and 2017, respectively, related to the operations of UPC Austria, the Vodafone Disposal Group and, for the 2017 periods, the LiLAC Group. For additional information, see note 4 to our condensed consolidated financial statements.

Net earnings attributable to noncontrolling interests

Net earnings attributable to noncontrolling interests includes the noncontrolling interests' share of the results of our continuing and discontinued operations. Net earnings attributable to noncontrolling interests increased (decreased) $16.0 million and ($29.1 million) during the three and six months ended June 30, 2018, respectively, as compared to the corresponding periods in 2017. The increase for the three-month comparison is primarily attributable to the net effect of improvements in the results of operations of Telenet and the impact of the Split-off Transaction. The decrease for the six-month comparison is primarily attributable to the impact of the Split-off Transaction.

Material Changes in Financial Condition

Sources and Uses of Cash

We are a holding company that is dependent on the capital resources of our subsidiaries to satisfy our liquidity requirements at the corporate level. Each of our significant operating subsidiaries is separately financed within one of our three subsidiary "borrowing groups." These borrowing groups include the respective restricted parent and subsidiary entities within Virgin Media, UPC Holding and Telenet. Although our borrowing groups typically generate cash from operating activities, the terms of the instruments governing the indebtedness of these borrowing groups may restrict our ability to access the liquidity of these subsidiaries. In addition, our ability to access the liquidity of these and other subsidiaries may be limited by tax and legal considerations, the presence of noncontrolling interests and other factors.

Cash and cash equivalents

The details of the U.S. dollar equivalent balances of our consolidated cash and cash equivalents at June 30, 2018 are set forth in the following table (in millions):

Cash and cash equivalents held by:	
Liberty Global and unrestricted subsidiaries:	
Liberty Global (a)	$ 31.8
Unrestricted subsidiaries (b)	638.8
Total Liberty Global and unrestricted subsidiaries	670.6
Borrowing groups (c):	
Telenet	147.7
Virgin Media (d)	38.2
UPC Holding	5.9
Total borrowing groups	191.8
Total cash and cash equivalents	$ 862.4

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(a) Represents the amount held by Liberty Global on a standalone basis.

(b) Represents the aggregate amount held by subsidiaries that are outside of our borrowing groups.

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

(d) The Virgin Media borrowing group includes certain subsidiaries of Virgin Media, but excludes the parent entity, Virgin Media Inc.

Liquidity of Liberty Global and its unrestricted subsidiaries

The $31.8 million of cash and cash equivalents held by Liberty Global and, subject to certain tax and legal considerations, the $638.8 million of aggregate cash and cash equivalents held by unrestricted subsidiaries, represented available liquidity at the corporate level at June 30, 2018. Our remaining cash and cash equivalents of $191.8 million at June 30, 2018 were held by our borrowing groups, as set forth in the table above. As noted above, various factors may limit our ability to access the cash of our borrowing groups. For information regarding certain limitations imposed by our subsidiaries' debt instruments at June 30, 2018, see note 9 to our condensed consolidated financial statements.

Our current sources of corporate liquidity include (i) cash and cash equivalents held by Liberty Global and, subject to certain tax and legal considerations, Liberty Global's unrestricted subsidiaries and (ii) interest and dividend income received on our and, subject to certain tax and legal considerations, our unrestricted subsidiaries' cash and cash equivalents and investments, including dividends received from the VodafoneZiggo JV, (iii) principal and interest payments received with respect to the VodafoneZiggo JV Receivable and (iv) cash received with respect to transition services provided to the VodafoneZiggo JV and Liberty Latin America.

From time to time, Liberty Global and its unrestricted subsidiaries may also receive (i) proceeds in the form of distributions or loan repayments from Liberty Global's borrowing groups or affiliates (including amounts from the VodafoneZiggo JV) upon (a) the completion of recapitalizations, refinancings, asset sales or similar transactions by these entities or (b) the accumulation of excess cash from operations or other means, (ii) proceeds upon the disposition of investments and other assets of Liberty Global and its unrestricted subsidiaries and (iii) proceeds in connection with the incurrence of debt by Liberty Global or its unrestricted subsidiaries or the issuance of equity securities by Liberty Global, including equity securities issued to satisfy subsidiary obligations. No assurance can be given that any external funding would be available to Liberty Global or its unrestricted subsidiaries on favorable terms, or at all. For information regarding the liquidity impacts of the disposition of UPC Austria and the pending disposition of the Vodafone Disposal Group, see note 4 to our condensed consolidated financial statements. For information regarding a dividend payment announced by Telenet subsequent to June 30, 2018, see note 17 to our condensed consolidated financial statements.

At June 30, 2018, our consolidated cash and cash equivalents balance included $806.3 million held by entities that are domiciled outside of the U.K. Based on our assessment of our ability to access the liquidity of our subsidiaries on a tax efficient basis, our expectations with respect to our corporate liquidity requirements and our preliminary assessment of the 2017 U.S. Tax Act, we do not anticipate that tax considerations will adversely impact our corporate liquidity over the next 12 months. Our ability to access the liquidity of our subsidiaries on a tax efficient basis is a consideration in assessing the extent of our share repurchase program.

In addition, the amount of cash we receive from our subsidiaries to satisfy U.S. dollar-denominated liquidity requirements is impacted by fluctuations in exchange rates, particularly with regard to the translation of British pounds sterling and euros into U.S. dollars. In this regard, the strengthening (weakening) of the U.S. dollar against these currencies will result in decreases (increases) in the U.S. dollars received from the applicable subsidiaries to fund the repurchase of our equity securities and other U.S. dollar-denominated liquidity requirements.

Our corporate liquidity requirements include (i) corporate general and administrative expenses, (ii) interest payments on our secured borrowing arrangement with respect to our ITV shares (the **ITV Collar Loan**), the Sumitomo Share Loan and (iii) principal payments on the ITV Collar Loan, the Sumitomo Share Loan and our secured borrowing arrangement with respect to 2.5 million of our Lionsgate shares (the **Lionsgate Loan**) to the extent not settled through the delivery of the underlying shares. In addition, Liberty Global and its unrestricted subsidiaries may require cash in connection with (a) the repayment of third-party and intercompany debt, (b) the satisfaction of contingent liabilities, (c) acquisitions, (d) the repurchase of equity and debt securities, (e) other investment opportunities, (f) any funding requirements of our subsidiaries and affiliates or (g) income tax payments. In addition, our parent entity uses available liquidity to make interest and principal payments on notes payable to certain of our unrestricted subsidiaries (aggregate outstanding principal of $12.0 billion at June 30, 2018 with varying maturity dates). For information regarding our commitments and contingencies, see note 15 to our condensed consolidated financial statements.

During the six months ended June 30, 2018, the aggregate purchase price of our share repurchases was $1,288.3 million, including direct acquisition costs. At June 30, 2018, the remaining amount authorized for share repurchases was $783.9 million. On July 31, 2018, our board of directors authorized an additional $500.0 million for share repurchases.

Liquidity of borrowing groups

The cash and cash equivalents of our borrowing groups are detailed in the table above. In addition to cash and cash equivalents, the primary sources of liquidity of our borrowing groups are cash provided by operations and borrowing availability under their respective debt instruments. For the details of the borrowing availability of such entities at June 30, 2018, see note 9 to our condensed consolidated financial statements. The aforementioned sources of liquidity may be supplemented in certain cases by contributions and/or loans from Liberty Global and its unrestricted subsidiaries. The liquidity of our borrowing groups generally is used to fund property and equipment additions, debt service requirements and income tax payments. From time to time, our borrowing groups may also require liquidity in connection with (i) acquisitions and other investment opportunities, (ii) loans to Liberty Global, (iii) capital distributions to Liberty Global and other equity owners or (iv) the satisfaction of contingent liabilities. No assurance can be given that any external funding would be available to our borrowing groups on favorable terms, or at all. For information regarding our borrowing groups' commitments and contingencies, see note 15 to our condensed consolidated financial statements.

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

Capitalization

We seek to maintain our debt at levels that provide for attractive equity returns without assuming undue risk. In this regard, we generally seek to cause our operating subsidiaries to maintain their debt at levels that result in a consolidated debt balance (excluding the ITV Collar Loan, Sumitomo Share Loan, Lionsgate Loan and measured using subsidiary debt figures at swapped foreign currency exchange rates, consistent with the covenant calculation requirements of our subsidiary debt agreements) that is between four and five times our consolidated Adjusted OIBDA, although the timing of our acquisitions and financing transactions and the interplay of average and spot foreign currency rates may impact this ratio. The ratio of our June 30, 2018 consolidated debt to our annualized consolidated Adjusted OIBDA for the quarter ended June 30, 2018 was 5.0x. In addition, the ratio of our June 30, 2018 consolidated net debt (debt, as defined above, less cash and cash equivalents) to our annualized consolidated Adjusted OIBDA for the quarter ended June 30, 2018 was 4.9x. Consistent with how we calculate our leverage ratios under our debt agreements, these ratios are presented on a basis that includes the debt and Adjusted OIBDA of both our continuing and discontinued operations.

When it is cost effective, we generally seek to match the denomination of the borrowings of our subsidiaries with the functional currency of the operations that support the respective borrowings. As further discussed in note 6 to our condensed consolidated financial statements, we also use derivative instruments to mitigate foreign currency and interest rate risk associated with our debt instruments.

Our ability to service or refinance our debt and to maintain compliance with the leverage covenants in the credit agreements and indentures of our borrowing groups is dependent primarily on our ability to maintain or increase the Adjusted OIBDA of our operating subsidiaries and to achieve adequate returns on our property and equipment additions and acquisitions. In addition, our ability to obtain additional debt financing is limited by the incurrence-based leverage covenants contained in the various debt instruments of our borrowing groups. For example, if the Adjusted OIBDA of Virgin Media were to decline, our ability to obtain additional debt could be limited. No assurance can be given that we would have sufficient sources of liquidity, or that any external funding would be available on favorable terms, or at all, to fund any such required repayment. At June 30, 2018, each of our borrowing groups was in compliance with its debt covenants. In addition, we do not anticipate any instances of non-compliance with respect to the debt covenants of our borrowing groups that would have a material adverse impact on our liquidity during the next 12 months.

At June 30, 2018, the outstanding principal amount of our consolidated debt, together with our capital lease obligations, aggregated $32.0 billion, including $3.4 billion that is classified as current in our condensed consolidated balance sheet and $23.1 billion that is not due until 2024 or thereafter. All of our consolidated debt and capital lease obligations have been borrowed or incurred by our subsidiaries at June 30, 2018. For additional information concerning our debt maturities, see note 9 to our condensed consolidated financial statements.

Notwithstanding our negative working capital position at June 30, 2018, we believe that we have sufficient resources to repay or refinance the current portion of our debt and capital lease obligations and to fund our foreseeable liquidity requirements during the next 12 months. However, as our maturing debt grows in later years, we anticipate that we will seek to refinance or otherwise extend our debt maturities. No assurance can be given that we will be able to complete these refinancing transactions or otherwise extend our debt maturities. In this regard, it is not possible to predict how political and economic conditions, sovereign debt concerns or any adverse regulatory developments could impact the credit and equity markets we access and, accordingly, our future liquidity and financial position. Our ability to access debt financing on favorable terms, or at all, could be adversely impacted by (i) the financial failure of any of our counterparties, which could (a) reduce amounts available under committed credit facilities and (b) adversely impact our ability to access cash deposited with any failed financial institution and (ii) tightening of the credit markets. In addition, any weakness in the equity markets could make it less attractive to use our shares to satisfy contingent or other obligations, and sustained or increased competition, particularly in combination with adverse economic or regulatory developments, could have an unfavorable impact on our cash flows and liquidity.

For additional information concerning our debt and capital lease obligations, see note 9 to our condensed consolidated financial statements.

Condensed Consolidated Statements of Cash Flows

General. Our cash flows are subject to significant variations due to FX.

Summary. The condensed consolidated statements of cash flows of our continuing operations for the six months ended June 30, 2018 and 2017 are summarized as follows:

	Six months ended June 30,		
	2018	**2017**	**Change**
		in millions	
Net cash provided by operating activities	$ 2,142.9	$ 1,558.4	$ 584.5
Net cash provided (used) by investing activities	(896.3)	1,319.1	(2,215.4)
Net cash used by financing activities	(3,037.5)	(2,677.0)	(360.5)
Effect of exchange rate changes on cash and cash equivalents and restricted cash	(9.3)	93.7	(103.0)
Net increase (decrease) in cash and cash equivalents and restricted cash	$ (1,800.2)	$ 294.2	$ (2,094.4)

Operating Activities. The increase in net cash provided by our operating activities is primarily attributable to (i) an increase in cash provided by our Adjusted OIBDA and related working capital items, (ii) an increase in cash provided due to higher cash receipts related to derivative instruments, (iii) an increase in cash provided due to lower payments of interest, (iv) an increase in cash provided due to lower payments for taxes and (v) an increase in the reported net cash provided by operating activities due to FX.

Investing Activities. The change in net cash provided (used) by our investing activities is primarily attributable to the net effect of (i) a decrease in cash of $1,569.4 million related to distributions received from affiliates during the 2017 period, (ii) a decrease in cash of $845.3 million associated with the equalization payment received in 2017 in connection with the completion of the VodafoneZiggo JV Transaction, (iii) an increase in cash of $366.9 million associated with lower cash paid in connection with acquisitions and (iv) a decrease in cash of $209.8 million due to higher capital expenditures. Capital expenditures increased from $588.0 million during the first six months of 2017 to $797.8 million during the first six months of 2018 due to (a) an increase in the net local currency capital expenditures of our subsidiaries, including a decrease associated with related working capital movements and higher capital-related vendor financing, and (b) an increase resulting from FX.

The capital expenditures that we report in our condensed consolidated statements of cash flows do not include amounts that are financed under capital-related vendor financing or capital lease arrangements. Instead, these amounts are reflected as non-cash additions to our property and equipment when the underlying assets are delivered and as repayments of debt when the principal is repaid. In this discussion, we refer to (i) our capital expenditures as reported in our condensed consolidated statements of cash flows, which exclude amounts financed under capital-related vendor financing or capital lease arrangements, and (ii) our total property and equipment additions, which include our capital expenditures on an accrual basis and amounts financed under capital-related vendor financing or capital lease arrangements. For further details regarding our property and equipment additions, see note 16 to our condensed consolidated financial statements. A reconciliation of our consolidated property and equipment additions to our consolidated capital expenditures, as reported in our condensed consolidated statements of cash flows, is set forth below:

	Six months ended June 30,	
	2018	2017
	in millions	
Property and equipment additions	$ 1,850.4	$ 1,631.7
Assets acquired under capital-related vendor financing arrangements	(1,187.9)	(1,164.1)
Assets acquired under capital leases	(46.5)	(97.9)
Changes in current liabilities related to capital expenditures	181.8	218.3
Capital expenditures, net	$ 797.8	$ 588.0
Capital expenditures, net:		
Third-party payments	$ 855.1	$ 782.9
Proceeds received for transfers to related parties (a)	(57.3)	(194.9)
Total capital expenditures, net	$ 797.8	$ 588.0

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(a) Primarily relates to transfers of centrally-procured property and equipment to our discontinued operations and the VodafoneZiggo JV.

The increase in our property and equipment additions during the six months ended June 30, 2018 is primarily due to (i) an increase due to FX and (ii) an increase in local currency expenditures of our subsidiaries, primarily due to the net effect of (a) an increase in expenditures to support new customer products and operational efficiency initiatives, (b) a decrease in expenditures for new build and upgrade projects, (c) an increase in expenditures for the purchase and installation of customer premises equipment and (d) an increase in baseline expenditures, including network improvements and expenditures for property and facilities and information technology systems.

Financing Activities. The increase in net cash used by our financing activities is primarily attributable to the net effect of (i) an increase in cash used of $1,589.5 million related to higher net repayments and repurchases of debt and capital lease obligations, (ii) a decrease in cash used of $832.5 million due to lower repurchases of Liberty Global ordinary shares, (iii) a decrease in cash used of $162.6 million related to VAT paid on behalf of the VodafoneZiggo JV during the 2017 period and (iv) a decrease in cash used of $149.2 million due to higher cash receipts related to derivative instruments.

Adjusted Free Cash Flow

We define adjusted free cash flow as net cash provided by the operating activities of our continuing operations, 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 condensed 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 an acquisition), 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, that 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 condensed consolidated statements of cash flows.

The following table provides the details of our adjusted free cash flow:

	Six months ended June 30,	
	2018	**2017 (a)**
	in millions	
Net cash provided by operating activities of our continuing operations (b)	$ 2,142.9	$ 1,558.4
Cash payments for direct acquisition and disposition costs	4.8	6.0
Expenses financed by an intermediary (c)	916.4	577.2
Capital expenditures, net	(797.8)	(588.0)
Principal payments on amounts financed by vendors and intermediaries	(3,353.3)	(1,944.4)
Principal payments on certain capital leases	(40.9)	(41.8)
Adjusted free cash flow	$ (1,127.9)	$ (432.6)

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(a) Adjusted free cash flow for the six months ended June 30, 2018 has been restated to reflect our January 1, 2018 adoption of ASU 2016-18.

(b) Amounts include interest payments related to debt that may be repaid in connection with the completion of the dispositions of UPC Austria and the Vodafone Disposal Group. These interest payments have not been allocated to discontinued operations.

(c) For purposes of our condensed 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 condensed 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.

Contractual Commitments

The following table sets forth the U.S. dollar equivalents of our commitments as of June 30, 2018:

	Payments due during:							
	Remainder of 2018	2019	2020	2021	2022	2023	Thereafter	Total
	in millions							
Debt (excluding interest)	$ 1,880.8	$ 1,556.8	$ 324.4	$ 2,968.8	$ 748.5	$ 983.4	$ 22,833.6	$ 31,296.3
Capital leases (excluding interest)	50.3	84.6	75.7	70.9	72.0	74.3	245.0	672.8
Network and connectivity commitments	402.8	345.4	283.4	250.2	67.5	49.6	787.8	2,186.7
Programming commitments	544.1	792.9	470.3	227.7	40.3	14.7	46.6	2,136.6
Purchase commitments	506.7	306.9	136.2	47.7	20.8	17.5	38.6	1,074.4
Operating leases	70.4	99.6	79.0	60.0	47.8	40.1	151.0	547.9
Other commitments	9.8	15.2	2.8	0.4	0.2	—	—	28.4
Total (a)	$ 3,464.9	$ 3,201.4	$ 1,371.8	$ 3,625.7	$ 997.1	$ 1,179.6	$ 24,102.6	$ 37,943.1
Projected cash interest payments on debt and capital lease obligations (b)	$ 673.1	$ 1,284.6	$ 1,380.3	$ 1,332.2	$ 1,262.8	$ 1,212.0	$ 3,511.2	$ 10,656.2

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(a) The commitments included in this table do not reflect any liabilities that are included in our June 30, 2018 condensed consolidated balance sheet other than debt and capital lease obligations. Our liability for uncertain tax positions in the various jurisdictions in which we operate ($375.5 million at June 30, 2018) has been excluded from the table as the amount and timing of any related payments are not subject to reasonable estimation.

(b) Amounts are based on interest rates, interest payment dates, commitment fees and contractual maturities in effect as of June 30, 2018. These amounts are presented for illustrative purposes only and will likely differ from the actual cash payments required in future periods. In addition, the amounts presented do not include the impact of our interest rate derivative contracts, deferred financing costs, original issue premiums or discounts.

For information concerning our debt and capital lease obligations, see note 9 to our condensed consolidated financial statements. For information concerning our commitments, see note 15 to our condensed consolidated financial statements.

In addition to the commitments set forth in the table above, we have significant commitments under (i) derivative instruments and (ii) defined benefit plans and similar agreements, pursuant to which we expect to make payments in future periods. For information regarding projected cash flows associated with these derivative instruments, see *Quantitative and Qualitative Disclosures about Market Risk — Projected Cash Flows Associated with Derivative Instruments* below. For information regarding our derivative instruments, including the net cash paid or received in connection with these instruments during the six months ended June 30, 2018 and 2017, see note 6 to our condensed consolidated financial statements.

Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

General

We are exposed to market risk in the normal course of our business operations due to our investments in various foreign countries and ongoing investing and financing activities. Market risk refers to the risk of loss arising from adverse changes in foreign currency exchange rates, interest rates and stock prices. The risk of loss can be assessed from the perspective of adverse changes in fair values, cash flows and future earnings. As further described below, we have established policies, procedures and processes governing our management of market risks and the use of derivative instruments to manage our exposure to such risks.

The information in this section should be read in conjunction with the more complete discussion that appears under *Quantitative and Qualitative Disclosures About Market Risk* in our 10-K. The following discussion updates selected numerical information to June 30, 2018.

The capitalized terms used below have been defined in the notes to our condensed consolidated financial statements. In the following text, the terms “we,” “our,” “our company” and “us” may refer, as the context requires, to Liberty Global or collectively to Liberty Global and its subsidiaries.

Unless otherwise indicated, convenience translations into U.S. dollars are calculated as of June 30, 2018.

Cash

We invest our cash in highly liquid instruments that meet high credit quality standards. We are exposed to exchange rate risk to the extent that the denominations of our cash and cash equivalent balances, revolving lines of credit and other short-term sources of liquidity do not correspond to the denominations of our and our subsidiaries’ short-term liquidity requirements. In order to mitigate this risk, we actively manage the denominations of our cash balances in light of our and our subsidiaries’ forecasted liquidity requirements. At June 30, 2018, $594.9 million or 69.0%, $234.8 million or 27.2% and $54.0 million or 6.3% of our consolidated cash balances were denominated in euros, U.S. dollars and British pounds sterling, respectively.

Foreign Currency Exchange Rates

The relationships between the primary currencies of the countries in which we operate and the U.S. dollar, which is our reporting currency, are shown below, per one U.S. dollar:

	June 30, 2018	December 31, 2017
Spot rates:		
Euro	0.8564	0.8318
British pound sterling	0.7579	0.7394
Swiss franc	0.9920	0.9736
Hungarian forint	282.46	258.41
Polish zloty	3.7479	3.4730
Czech koruna	22.258	21.243
Romanian lei	3.9949	3.8830

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
Average rates:				
Euro	0.8389	0.9094	0.8262	0.9233
British sterling	0.7353	0.7821	0.7270	0.7944
Swiss franc	0.9851	0.9852	0.9666	0.9944
Hungarian forint	266.15	281.97	259.60	285.92
Polish zloty	3.5762	3.8371	3.4880	3.9440
Czech koruna	21.484	24.152	21.074	24.747
Romanian lei	3.9048	4.1396	3.8464	4.1911

Interest Rate Risks

We are exposed to changes in interest rates primarily as a result of our borrowing activities, which include fixed-rate and variable-rate borrowings by our borrowing groups. Our primary exposure to variable-rate debt is through the EURIBOR-indexed and LIBOR-indexed debt of UPC Holding and Telenet, the LIBOR-indexed debt of Virgin Media, and the variable-rate debt of certain of our other subsidiaries.

In general, we seek to enter into derivative instruments to protect against increases in the interest rates on our variable-rate debt. Accordingly, we have entered into various derivative transactions to manage exposure to increases in interest rates. We use interest rate derivative contracts to exchange, at specified intervals, the difference between fixed and variable interest rates calculated by reference to an agreed-upon notional principal amount. We also use interest rate cap and collar agreements and swaptions that lock in a maximum interest rate if variable rates rise, but also allow our company to benefit, to a limited extent in the case of collars, from declines in market rates. Under our current guidelines, we use various interest rate derivative instruments to mitigate interest rate risk, generally for five years, with the later years covered primarily by swaptions. As such, the final maturity dates of our various portfolios of interest rate derivative instruments generally fall short of the respective maturities of the underlying variable-rate debt. In this regard, we use judgment to determine the appropriate composition and maturity dates of our portfolios of interest rate derivative instruments, taking into account the relative costs and benefits of different maturity profiles in light of current and expected future market conditions, liquidity issues and other factors. For additional information concerning the impacts of these interest rate derivative instruments, see note 6 to our condensed consolidated financial statements.

In July 2017, the U.K. Financial Conduct Authority (the authority that regulates LIBOR) announced that it intends to stop compelling banks to submit rates for the calculation of LIBOR after 2021. Currently, it is not possible to predict the exact transitional arrangements for calculating applicable reference rates that may be made in the U.K., the U.S., the Eurozone or elsewhere given that a number of outcomes are possible, including the cessation of the publication of one or more reference rates. Our loan documents contain provisions that contemplate alternative calculations of the base rate applicable to our LIBOR-indexed debt to the extent LIBOR is not available, which alternative calculations we do not anticipate will be materially different from what would have been calculated under LIBOR. Additionally, no mandatory prepayment or redemption provisions would be triggered under our loan documents in the event that the LIBOR rate is not available. It is possible, however, that any new reference rate that applies to our LIBOR-indexed debt could be different than any new reference rate that applies to our LIBOR-indexed derivative instruments. We anticipate managing this difference and any resulting increased variable-rate exposure through modifications to our debt and/or derivative instruments, however future market conditions may not allow immediate implementation of desired modifications and/or the company may incur significant associated costs.

Weighted Average Variable Interest Rate. At June 30, 2018, the outstanding principal amount of our variable-rate indebtedness aggregated $12.2 billion, and the weighted average interest rate (including margin) on such variable-rate indebtedness was approximately 3.9%, excluding the effects of interest rate derivative contracts, deferred financing costs, original issue premiums or discounts and commitment fees, all of which affect our overall cost of borrowing. Assuming no change in the amount outstanding, and without giving effect to any interest rate derivative contracts, deferred financing costs, original issue premiums or discounts and commitment fees, a hypothetical 50 basis point (0.50%) increase (decrease) in our weighted average variable interest rate would increase (decrease) our annual consolidated interest expense and cash outflows by $61.0 million. As discussed above and in note 6 to our consolidated financial statements, we use interest rate derivative contracts to manage our exposure to increases in variable interest rates. In this regard, increases in the fair value of these contracts generally

would be expected to offset most of the economic impact of increases in the variable interest rates applicable to our indebtedness to the extent and during the period that principal amounts are matched with interest rate derivative contracts.

Sensitivity Information

Information concerning the sensitivity of the fair value of certain of our more significant derivative instruments to changes in market conditions is set forth below. The potential changes in fair value set forth below do not include any amounts associated with the remeasurement of the derivative asset or liability into the applicable functional currency. For additional information, see notes 6 and 7 to our condensed consolidated financial statements.

Virgin Media Cross-currency and Interest Rate Derivative Contracts

Holding all other factors constant, at June 30, 2018:

(i) an instantaneous increase (decrease) of 10% in the value of the British pound sterling relative to the U.S. dollar would have decreased (increased) the aggregate fair value of the Virgin Media cross-currency and interest rate derivative contracts by approximately £587 million ($774 million); and

(ii) an instantaneous increase (decrease) in the relevant base rate of 50 basis points (0.50%) would have increased (decreased) the aggregate fair value of the Virgin Media cross-currency and interest rate derivative contracts by approximately £63 million ($83 million).

UPC Holding Cross-currency and Interest Rate Derivative Contracts

Holding all other factors constant, at June 30, 2018:

(i) an instantaneous increase (decrease) of 10% in the value of the Swiss franc, Polish zloty, Hungarian forint, Czech koruna and Romanian lei relative to the euro would have decreased (increased) the aggregate fair value of the UPC Holding cross-currency and interest rate derivative contracts by approximately €500 million ($584 million);

(ii) an instantaneous increase (decrease) of 10% in the value of the euro relative to the U.S. dollar would have decreased (increased) the aggregate fair value of the UPC Holding cross-currency and interest rate derivative contracts by approximately €279 million ($326 million); and

(iii) an instantaneous increase (decrease) of 10% in the value of the Swiss franc relative to the U.S. dollar would have decreased (increased) the aggregate fair value of the UPC Holding cross-currency and interest rate derivative contracts by approximately €90 million ($105 million).

Telenet Cross-currency and Interest Rate Derivative Contracts

Holding all other factors constant, at June 30, 2018:

(i) an instantaneous increase (decrease) of 10% in the value of the euro relative to the U.S. dollar would have decreased (increased) the aggregate fair value of the Telenet cross-currency derivative contracts by approximately €282 million ($329 million); and

(ii) an instantaneous increase (decrease) in the relevant base rate of 50 basis points (0.50%) would have increased (decreased) the aggregate fair value of the Telenet cross-currency, interest rate cap and swap contracts by approximately €87 million ($102 million).

ITV Collar

Holding all other factors constant, at June 30, 2018, an instantaneous increase (decrease) of 10% in the per share market price of ITV’s ordinary shares would have decreased (increased) the fair value of the ITV Collar by approximately £69 million ($91 million).

Projected Cash Flows Associated with Derivative Instruments

The following table provides information regarding the projected cash flows associated with our derivative instruments. The U.S. dollar equivalents presented below are based on interest rates and exchange rates that were in effect as of June 30, 2018. These amounts are presented for illustrative purposes only and will likely differ from the actual cash payments required in future periods. For additional information regarding our derivative instruments, see note 6 to our condensed consolidated financial statements.

	Payments (receipts) due during:							
	Remainder of 2018	**2019**	**2020**	**2021**	**2022**	**2023**	**Thereafter**	**Total**
					in millions			
Projected derivative cash payments (receipts), net:								
Interest-related (a)	$ (66.5)	$ 30.5	$ (95.8)	$ (78.9)	$ (106.1)	$ (127.0)	$ (140.0)	$ (583.8)
Principal-related (b)	—	5.9	77.2	(180.9)	(259.4)	(164.4)	(666.6)	(1,188.2)
Other (c)	—	—	30.3	33.2	(21.7)	(336.8)	(123.8)	(418.8)
Total	$ (66.5)	$ 36.4	$ 11.7	$ (226.6)	$ (387.2)	$ (628.2)	$ (930.4)	$ (2,190.8)

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(a) Includes (i) the cash flows of our interest rate cap, swaption, collar and swap contracts and (ii) the interest-related cash flows of our cross-currency and interest rate swap contracts.

(b) Includes the principal-related cash flows of our cross-currency swap contracts.

(c) Includes amounts related to our equity-related derivative instruments and foreign currency forward contracts. We may elect to use cash or the collective value of the related shares and equity-related derivative instrument to settle the ITV Collar Loan and the Lionsgate Loan.

Item 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

In accordance with Exchange Act Rule 13a-15, we carried out an evaluation, under the supervision and with the participation of management, including our chief executive officer and chief financial officer (the Executives), of the effectiveness of our disclosure controls and procedures as of June 30, 2018. In designing and evaluating the disclosure controls and procedures, the Executives recognize that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is necessarily required to apply judgment in evaluating the cost-benefit relationship of possible controls and objectives. Based on that evaluation, the Executives concluded that our disclosure controls and procedures as of June 30, 2018 effectively provide reasonable assurance that information required to be disclosed in our reports filed or submitted under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission’s rules and forms.

Changes in Internal Controls over Financial Reporting

There have been no changes in our internal controls over financial reporting identified in connection with the evaluation described above that occurred during the fiscal quarter covered by this Quarterly Report on Form 10-Q that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

PART II — OTHER INFORMATION

Unless otherwise defined herein, the capitalized terms used in Part II of this Quarterly Report on Form 10-Q are defined in the notes to our condensed consolidated financial statements.

Item 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

(c) *Issuer Purchases of Equity Securities*

The following table sets forth information concerning our company's purchase of its own equity securities during the three months ended June 30, 2018:

Period	Total number of shares purchased	Average price paid per share (a)	Total number of shares purchased as part of publicly announced plans or programs	Approximate dollar value of shares that may yet be purchased under the plans or programs
April 1, 2018 through April 30, 2018:				
Class A	609,400	$ 31.71	609,400	(b)
Class C	2,001,300	$ 30.90	2,001,300	(b)
May 1, 2018 through May 31, 2018:				
Class A	8,699,200	$ 29.53	8,699,200	(b)
Class C	11,387,500	$ 28.77	11,387,500	(b)
June 1, 2018 through June 30, 2018:				
Class A	1,021,400	$ 29.49	1,021,400	(b)
Class C	3,402,500	$ 28.27	3,402,500	(b)
Total — April 1, 2018 through June 30, 2018:				
Class A	10,330,000	$ 29.65	10,330,000	(b)
Class C	16,791,300	$ 28.93	16,791,300	(b)

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

(b) At June 30, 2018, the remaining amount authorized for share repurchases was $783.9 million. On July 31, 2018, our board of directors authorized an additional $500.0 million for share repurchases.

Item 6. EXHIBITS

Listed below are the exhibits filed as part of this Quarterly Report (according to the number assigned to them in Item 601 of Regulation S-K):

2 — Plan of acquisition, reorganization, arrangement, liquidation or succession

2.1	Sale and Purchase Agreement, dated as of May 9, 2018, by and among Liberty Global plc and Vodafone Group plc and certain of their respective subsidiaries (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed May 11, 2018 (File No. 001-35961)).

4 — Instruments Defining the Rights of Securities Holders, including Indentures:

4.1	Additional Facility AN Accession Agreement dated May 24, 2018 and entered into between, among others, Telenet Financing USD LLC as the Borrower, Telenet BVBA as a Guarantor and The Bank of Nova Scotia as the Facility Agent (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed May 31, 2018 (File No. 001-35961) (the May 2018 8-K)).
4.2	Additional Facility AO Accession Agreement dated May 25, 2018 and entered into between, among others, Telenet International Finance S.à r.l. as the Borrower, Telenet BVBA as a Guarantor and The Bank of Nova Scotia as the Facility Agent (incorporated by reference to Exhibit 4.2 to the May 2018 8-K).
4.3	Additional Facility E Accession Agreement dated May 24, 2018 and entered into between, among others, Unitymedia Hessen GmbH & Co. KG, Unitymedia Finance LLC, Unitymedia GmbH, The Bank of Nova Scotia and Credit Suisse AG, London Branch (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed May 31, 2018 (File No. 001-35961)).

10 — Material Contracts:

10.1	Employment Agreement dated as of June 28, 2018, between Liberty Global, Inc. and Enrique Rodriguez.*

31 — Rule 13a-14(a)/15d-14(a) Certification:

31.1	Certification of President and Chief Executive Officer*
31.2	Certification of Executive Vice President and Chief Financial Officer*

32 — Section 1350 Certification**

101.SCH	XBRL Taxonomy Extension Schema Document*
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document*
101.DEF	XBRL Taxonomy Extension Definition Linkbase*
101.LAB	XBRL Taxonomy Extension Label Linkbase Document*
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document*

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* Filed herewith

** Furnished herewith

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

LIBERTY GLOBAL PLC

Dated: August 8, 2018	/s/ MICHAEL T. FRIES
	Michael T. Fries *President and Chief Executive Officer*
Dated: August 8, 2018	/s/ CHARLES H.R. BRACKEN
	Charles H.R. Bracken *Executive Vice President and Chief Financial Officer*

EMPLOYMENT AGREEMENT

This EMPLOYMENT AGREEMENT (this "Agreement") is made as of June 28, 2018 by and among Liberty Global, Inc., a Delaware corporation (the "Company") and Mr. Enrique Rodriguez (the "Executive") (the Company and the Executive collectively, the "Parties").

WHEREAS, the Company desires to employ the Executive as Executive Vice President and Chief Technology Officer; and

WHEREAS, the Parties desire to enter into this Agreement to secure the Executive's employment during the term hereof, on the terms and conditions set forth herein.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

Article I
DEFINITIONS

Section 1.1 Defined Terms. As used in this Agreement, the following terms have the following meanings:

"Board" means the Board of Directors of the Parent.

"Cause" shall mean a determination in good faith by the Company that the Executive (a) has engaged in gross negligence, gross incompetence or willful misconduct in the performance of the Executive's duties with respect to the Parent, the Company or any of their subsidiaries, (b) has refused without proper legal reason to perform the Executive's duties and responsibilities to the Company or any of its subsidiaries, (c) has materially breached any provision of this Agreement or any material written agreement or corporate policy or code of conduct established by the Parent, the Company or any of their subsidiaries (and as may be amended from time to time), (d) has engaged in conduct that is materially injurious to the Parent, the Company or any of their subsidiaries, (e) has disclosed without specific authorization from the Company material Confidential Information, (f) has committed an act of theft, fraud, embezzlement, misappropriation or breach of a fiduciary duty to the Parent, the Company or any of their subsidiaries, (g) has been indicted for a crime involving fraud, dishonesty or moral turpitude or any felony (or a crime of similar import in a jurisdiction outside the U.S.), or (h) has, directly or indirectly (through a failure to put in place and enforce appropriate compliance controls and procedures), violated, or there appears to be, after due inquiry, a reasonable basis to conclude that the Executive has violated, the Foreign Corrupt Practices Act, the UK Bribery Act, and/or other similar applicable laws, in any material respect.

"Class A Shares" means the Parent's Class A shares.

"Class C Shares" means the Parent's Class C shares.

"Code" means the Internal Revenue Code of 1986, as amended.

"Company Entity" means the Parent, the Company and/or any of their subsidiaries or other affiliates.

"Compensation Committee" means the Compensation Committee of the Board.

"Date of Termination" shall mean the date specified in the Notice of Termination relating to termination of the Executive's employment with the Company; provided, that the Company may require an earlier Date of Termination than the date specified by the Executive in a Notice of Termination delivered pursuant to Section 4.2.

"Disability" shall mean that the Executive meets the requirements for disability benefits under the Company's long-term disability plan.

"Good Reason" shall mean any of the following events that occur without the Executive's prior written consent: (a) the assignment to the Executive of any duties materially inconsistent with the Executive's position, authority, duties or responsibilities, or any other action by the Company that results in a material diminution in the Executive's authority, duties or responsibilities (excluding for this purpose an isolated, insubstantial and inadvertent action not taken in bad faith); (b) any material breach of this Agreement by the Company; (c) a material reduction in Base Salary or material reduction in target Annual Bonus under Article III, as each may be increased from time to time; or (d) relocation of Executive's principal place of employment from the Company's headquarters, including the Greater London, Amsterdam or Denver metropolitan area.

In order for a termination to be considered for "Good Reason," (i) the Executive must provide written notice to the Company of the existence of the condition(s) the Executive claims constitutes Good Reason within 30 days of the initial existence, or if later, the Executive's actual good faith knowledge of the condition(s), (ii) the Company shall have 30 days after such notice is given (the "Cure Period") during which to remedy the condition(s) to the extent that such condition(s) is reasonably curable, and, if not so cured, (iii) the Executive must actually terminate employment within 30 days of the expiration of the Cure Period.

"Grant Award Agreements" means collectively and individually any one of the equity grant agreements in the form established by the Company or the Parent, as the case may be, awarding equity grants to senior management personnel, including the Executive.

"Incentive Plan" means the Liberty Global 2014 Incentive Plan, as may be amended from time to time, or a successor plan.

"Notice of Termination" shall mean a written notice delivered by the Company or the Executive to the other party in accordance with Section 8.9 indicating the specific termination provision in this Agreement relied upon for termination of the Executive's employment and the Date of Termination that sets forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of the Executive's employment under the provision so indicated.

"Parent" means Liberty Global plc, a company organized under the laws of England & Wales.

"Secondment Agreement" means the Secondment Agreement between the Executive and Liberty Global Technology Limited, an England & Wales company, dated as of the date hereof, to be executed on or about the Start Date substantially in the form previously provided to the Executive, as may be amended from time to time.

"Start Date" means the effective date of employment, as may be agreed between the Executive and the Company, which shall be no later than August 1, 2018.

Section 1.2 Other Interpretive Provisions.

(a) Capitalized terms are used as defined in this Agreement, unless otherwise indicated.

(b) The name assigned to this Agreement and headings and captions of the sections, paragraphs, subparagraphs, clauses and subclauses of this Agreement are for convenience of reference only and shall not in any way affect the meaning or interpretation of any of the provisions hereof. Words of inclusion shall not be construed as terms of limitation herein, so that references to "include," "includes" and "including" shall not be limiting and shall be regarded as references to non-exclusive and non-characterizing illustrations. Any reference to a Section of the Code shall be deemed to include any successor to such Section.

ARTICLE II
EMPLOYMENT & DUTIES

Section 2.1 Title and Location. The Company will employ the Executive, and the Executive agrees to serve as Executive Vice President and Chief Technology Officer of the Company and of the Parent, on the terms and conditions hereinafter set forth, with the location of employment to be principally Denver, Colorado, with an initial secondment to London, England.

Section 2.2 Employment Term. The Executive's employment by the Company pursuant to this Agreement will commence on the Start Date and will continue until terminated pursuant to Article IV.

Section 2.3 Duties; Other Interests.

(a) *Reporting*. The Executive shall report directly to the President and CEO of the Parent (the "CEO").

(b) *Duties*. The Executive agrees to serve in the positions referred to in Section 2.1 and to perform diligently, faithfully and to the best of the Executive's abilities the usual and customary duties and services appertaining to such positions, as well as such additional duties and services appropriate to such positions which the Parent, the Company and the Executive mutually may agree upon from time to time or which the CEO may lawfully direct. The Executive's employment shall also be subject to the policies maintained and established by the Parent and/or the Company that are of general applicability to the

Parent's and/or the Company's employees, as such policies may be amended from time to time, including without limitation all relevant Codes of Conduct.

(c) *Business Time*. As provided in Section 6.1, the Executive will, while employed, devote substantially all of the Executive's business time and attention to the Executive's duties and responsibilities for the Parent and the Company. Notwithstanding the foregoing, the Executive may engage in personal business and non-profit activities that in no manner conflict with his ability to fulfill his duties to the Parent and the Company.

(d) *Fiduciary Duties*. The Executive acknowledges and agrees that the Executive owes a fiduciary duty of loyalty, fidelity and allegiance to act in the best interests of the Parent and the Company and to do no act that would materially injure the business, interests, or reputation of the Parent and the Company or any of their affiliates. In keeping with these duties, the Executive shall make full disclosure to the Parent of all business opportunities pertaining to the Parent's and the Company's business and shall not appropriate for the Executive's own benefit business opportunities concerning the subject matter of the fiduciary relationship.

ARTICLE III
COMPENSATION & BENEFITS

Section 3.1 Compensation.

(a) *Base Salary*. During the Employment Period, the Company shall pay the Executive a base salary (the "Base Salary"), to be paid on the same payroll cycle as other U.S.-based executive officers of the Company, at an annual rate of $1 million dollars ($1,000,000). The Base Salary will be reviewed annually and may be adjusted upward (but not downward) by the CEO and the Compensation Committee in its discretion.

(b) *Annual Bonus*. For each calendar year ending during the Employment Period beginning with calendar year 2018, the Executive will be eligible to earn an "Annual Bonus," provided that the Executive remains employed with a Company Entity through the payment date for such Annual Bonus (except as otherwise provided herein). The Executive's target Annual Bonus opportunity for calendar year 2018 is $2.5 million dollars ($2,500,000), subject to proration for the amount of the calendar year in which the Executive is employed. The target Annual Bonus will be reviewed annually and for calendar years after 2018 may be adjusted by the Compensation Committee in its discretion. No portion of the Annual Bonus is guaranteed. The Annual Bonus shall be subject to the terms and conditions established by the Compensation Committee with respect to the Parent's annual incentive program, including any recoupment provision, and shall be paid in the calendar year following the year of performance in the same manner as for other U.S. employees.

(c) *Annual Equity Awards*. The Executive shall be granted annual equity awards under the terms of the Incentive Plan and the implementing award agreements in each calendar year during the Employment Period, conditioned upon the Executive being employed by a Company Entity on the applicable grant date (the "Annual Equity Grant").

For calendar year 2018, the Annual Equity Grant shall have a target equity value of $5 million dollars ($5,000,000) (the "Annual Grant Value"). The target Annual Grant Value will be reviewed annually and may be adjusted by the Compensation Committee in its sole discretion. The Annual Equity Grant shall be granted in the form, at the same time and on otherwise substantially the same terms and conditions as annual equity grants are made to the Parent's other senior executive officers (pursuant to a grant award agreement in respect thereof to be established by the Parent).

(d) *Sign-on Bonus.* Subject to the provisions of this Section 3.1(d), the Executive shall be entitled to the following cash and equity benefits (the benefits in Section 3.1(d)(i) and Section 3.1(d)(ii) collectively, the "Sign-on Bonus"):

(i) The Company will pay to the Executive a one-time sign-on bonus in the amount of $1.5 million dollars ($1,500,000) on the first payroll date following the start date (the "Cash Sign-on Bonus"). The Cash Sign-on Bonus will be paid in accordance with regular payroll for employees of the Company (including without limitation, payroll tax, other tax withholding and other allowances) on the regular payroll date for employees of the Company next following such date. In the event that the employment of the Executive is terminated for Cause by the Company or for any reason by the Executive (including without limitation by death or disability) at any time prior to July 1, 2019, within sixty (60) days of the termination date, the Executive will reimburse the Company for the Cash Sign-on Bonus in full, which may be effected through reduction in severance, if any, or other offset against sums owing.

(ii) The Company will grant to the Executive an award of restricted share units with respect to such number of Class A Shares and Class C Shares [based upon an aggregate value to be equal to $2.5 million as of the start date] (the "Equity Sign-on Bonus") in a ratio of 1:2, Class A : Class C. The Equity Sign-on Bonus shall vest in full on the one-year anniversary of the Start Date, subject to the Executive's continuous employment with the Company through such date.

The number of shares granted shall be determined by the Company using the average market closing prices of the Class A Shares and the Class C Shares (respectively) for the ten (10) trading days ending two (2) trading days prior to the Start Date.

(iii) The Sign-on Bonus is intended to recompense the Executive for cash and equity make-whole compensation specified in the November 5, 2017 offer letter to him by his employer immediately prior to this Agreement, which he is foregoing as a result of entering into this Agreement (the "Make-Whole Compensation Amount"). In the event that the settlement arrangements with such employer for his voluntary termination do in fact provide for payments of, or forgiveness of recoupment of, all or a portion of the Make-Whole Compensation to the Executive notwithstanding the termination, the Executive agrees to notify the Company with the details of such payments or forgiveness of recoupment and the Equity Sign-On

Bonus will be retroactively adjusted downward in an equal amount to reflect the receipt of the Make-Whole Compensation through offset or repayment by the Executive to the Company, provided that in no event will the downward adjustment exceed $2.4 million, leaving the Executive with a minimum of $100,000 of Equity Sign-on Bonus. The Cash Sign-on Bonus is not subject to any adjustment.

Section 3.2 Withholding. The Company and the Parent will have the right to withhold from payments otherwise due and owing to the Executive, an amount sufficient to satisfy any federal, state, and/or local income and payroll taxes (and any UK or foreign taxes), any amount required to be deducted under any employee benefit plan in which the Executive participates or as required to satisfy any valid lien or court order.

Section 3.3 Employee Benefits. During the Employment Period, the Executive shall have the opportunity to participate in all U.S.-based employee benefit plans and arrangements sponsored or maintained by the Company for the benefit of its senior executive group based in Denver, including without limitation, all group insurance plans (term life, medical and disability) and retirement plans, subject to the terms and conditions of such plans. The Executive shall be entitled to vacation leave that is consistent with the vacation policy for U.S.-based senior executive personnel in Denver.

Section 3.4 Re-location Expenses. The Company will provide re-location benefits to the Executive in accordance with its mobility policy for U.S. based senior executives as in effect on the date hereof.

Section 3.5 Business Expenses. The Executive shall be reimbursed for all reasonable expenses incurred by the Executive in the discharge of the Executive's duties, subject to and in accordance with the Company's practices and policies for its senior executives.

ARTICLE IV
TERMINATION

Section 4.1 Company's Right to Terminate. This is an at-will employment agreement. The Company may terminate the Executive's employment under this Agreement with or without Cause at any time by providing the Executive with a Notice of Termination, which in the case of a termination without Cause shall have an effective date not less than thirty (30) days after delivery of such Notice of Termination.

Section 4.2 The Executive's Right to Terminate. The Executive may terminate the Executive's employment under this Agreement for any reason whatsoever, by providing the Company with a Notice of Termination, with an effective date not less than ninety (90) days after delivery of such Notice of Termination, unless such termination is effected with Good Reason, in which case the notice shall comply with the timing specified in the definition of Good Reason.

Section 4.3 Death; Disability. If not terminated earlier, the Executive's employment under this Agreement shall terminate upon the date of the Executive's death during his employment or upon the date specified in a Notice of Termination upon the Executive's Disability.

Section 4.4 Deemed Resignations. Unless otherwise agreed by the Parent and the Company in writing prior to the termination of the Executive's employment, any termination of the Executive's employment will constitute an automatic resignation of the Executive as an officer, board member or any other position with the Parent, the Company or any of their affiliates. The Executive agrees to execute and deliver all documents reasonably requested by the Parent in connection therewith.

ARTICLE V
EFFECT OF TERMINATION OF EMPLOYMENT ON COMPENSATION

Section 5.1 Effect of Termination of Employment on Compensation.

(a) *Benefit Obligation and Accrued Obligation Defined*. For purposes of this Agreement, payment of the "Benefit Obligation" shall mean payment by the Company to the Executive (or the Executive's designated beneficiary or legal representative, as applicable), in accordance with the terms of this Agreement or the applicable plan document, of all vested benefits to which he is entitled under the terms of the employee benefit plans and compensation arrangements in which the Executive is a participant as of the Date of Termination. "Accrued Obligation" means the sum of (1) the Executive's Base Salary through the Date of Termination and (2) any incurred but unreimbursed expenses for which the Executive is entitled to reimbursement in accordance with Company policies, in each case, to the extent not theretofore paid.

(b) *Termination by the Company without Cause; Termination by the Executive with Good Reason; Disability*. Subject to Section 5.1(e), if the Executive's employment is terminated involuntarily by the Company without Cause, by the Company due to Disability, or voluntarily by the Executive with Good Reason, the Company shall pay or provide to the Executive (or the Executive's guardian, if applicable):

(i) The Accrued Obligation within thirty (30) days following the Date of Termination or such earlier date as may be required by applicable law;

(ii) The Benefit Obligation at the times specified in and in accordance with the terms of the applicable employee benefit plans and compensation arrangements;

(iii) If the Executive is employed for at least nine (9) months of a calendar year, a pro-rated Annual Bonus for the year in which the Date of Termination occurs based on actual performance results as determined by the Compensation Committee, multiplied by a fraction, the numerator of which shall be the number of days of the Executive's actual employment in the year in which the Date of Termination occurs and the denominator of which shall be the total number of days in the year in which the Date of Termination occurs, which amount shall be paid at the time that bonuses for such year are otherwise paid to the Company's active executives; *provided that* if at any time the Compensation Committee of the Parent adopts a different policy for similarly situated U.S. senior executives regarding such terminations during a calendar year, such policy shall apply; provided further, that for calendar year 2018, a pro-rated Annual Bonus from the Effective Date shall apply. (Any individual performance rating will be at the discretion of the CEO.)

(iv) Severance equal to one (1) times the Executive's annual Base Salary at the rate in effect on the Date of Termination, which shall be paid in equal installments over a twelve- (12-) month period commencing on the sixtieth (60th) day following the Date of Termination in accordance with the Company's standard payroll cycle; provided, however, that if the Executive's termination is due to Disability, the total amount payable pursuant to this Section 5.1(b)(iv) shall be reduced by the total amount of all disability benefits payable to the Executive pursuant to employee benefit plans of any Company Entity during the period of such installment payments; and

(v) During the period beginning on the Date of Termination and ending on the earlier of (A) the date that is twelve (12) months after the Date of Termination or (B) such date that the Executive obtains similar coverage from a subsequent employer, the Executive and the Executive's spouse and eligible dependents, as the case may be, shall be entitled to continue participation in all welfare benefit plans, practices, policies and programs in which the Executive and the Executive's spouse and eligible dependents participate in immediately prior to the Date of Termination at a cost to the Executive no greater than that of active senior executive employees of the Company.

(c) *Death*. Subject to Section 5.1(e), if the Executive's employment is terminated due to the Executive's death, the Company shall pay or provide to the Executive's estate:

(i) The Accrued Obligation within thirty (30) days following the Date of Termination or such earlier date as may be required by applicable law;

(ii) The Benefit Obligation at the times specified in and in accordance with the terms of the applicable employee benefit plans and compensation arrangements;

(iii) A pro-rated Annual Bonus for the year in which the Date of Termination occurs based on actual performance results as determined by the Compensation Committee, multiplied by a fraction, the numerator of which shall be the number of days of the Executive's actual employment in the year in which the Date of Termination occurs and the denominator of which shall be the total number of days in the year in which the Date of Termination occurs, which amount (if any) shall be paid at the time that bonuses for such year are otherwise paid to the Company's active executives (any individual performance rating will be at the discretion of the CEO); and

(iv) Severance equal to one times the Executive's annual Base Salary at the rate in effect on the Date of Termination, which shall be paid in equal installments over a twelve- (12-) month period commencing on the sixtieth (60th) day following the Date of Termination in accordance with the Company's standard payroll cycle.

(d) *Other Terminations*. If, during the Employment Period, the Executive's employment is terminated for any reason other than those specified in Section 5.1(b) or 5.1(c), the Executive shall be entitled only to the Accrued Obligation, payable within thirty (30) days following the Date of Termination or such earlier date as may be required by applicable law, and the Benefit Obligation, payable or due at the times specified in and in accordance with the terms of the applicable employee benefit plans and compensation arrangements, and the Executive shall not be entitled to any other amounts under this Agreement.

(e) *Release of Claims*. Notwithstanding any provision herein to the contrary, if the Executive has not delivered to the Company an executed release, substantially in the form attached as Exhibit A (the "Release"), which shall effectuate a full and complete release of claims against the Company and its affiliates, officers and directors and acknowledge the applicability of continuing covenants under this Agreement, on or before the fiftieth (50th) day after the Date of Termination, or if the Executive revokes such executed Release prior to the sixtieth (60th) day after the Date of Termination, the Executive (or the Executive's estate or guardian, as applicable) shall forfeit all of the payments and benefits described in Sections 5.1(b)(iii) through (v) and Section 5.1(c)(iii) through (iv).

(f) *Cash Sign-on Bonus Reimbursement*. The provisions of Section 3.1(d)(i) shall apply to any termination payment under this Article V, other than a termination Without Cause or for death or Disability.

ARTICLE VI
RESTRICTIVE COVENANTS

Section 6.1 Exclusive Services. Except as permitted in accordance with Section 2.3(c), the Executive shall during the Employment Period, except during vacation periods, periods of illness and the like, devote substantially all of the Executive's business time and attention to the Executive's duties and responsibilities for the Parent and the Company. During the Executive's employment with any Company Entity, the Executive shall not engage in any other business activity that would materially interfere with the Executive's responsibilities or the performance of the Executive's duties under this Agreement, provided that, (i) with the consent of the CEO, the Executive may sit on the boards of directors of other entities (and earn compensation relating to such service as a director); (ii) with prior disclosure to the Parent's General Counsel, the Executive may engage in civic and charitable activities and (iii) the Executive may manage personal investments and affairs, in each case so long as such other activities do not materially interfere with the performance of the Executive's duties hereunder. If the Executive serves on the board of directors or advisory board or similar body of any entity at the direction of the Parent or the Company, any compensation of the Executive for such service shall be paid to a Company Entity unless otherwise determined by the CEO and the Parent's General Counsel.

Section 6.2 Non-Solicitation, Non-Interference and Non-Competition. As a means to protect the Company Entities' legitimate business interests including protection of the "Confidential Information" (as defined in Section 6.3(a)) of any Company Entity (the Executive hereby agreeing and acknowledging that the activities prohibited by this Article VI would necessarily involve the use of Confidential Information), during the "Restricted Period" (as defined below), the Executive shall not, directly, indirectly or as an agent on behalf of any person, firm, partnership, corporation or other entity:

(a) solicit for employment, consulting or any other provision of services or hire any person who is a full-time or part-time employee of (or in the preceding six (6) months was employed by) any Company Entity or an individual performing, on average, twenty or more hours per week of personal services as an independent contractor to any Company Entity. This includes, without limitation, inducing or attempting to induce, or influencing or attempting to influence, any such person to terminate his or her employment or performance of services with or for any Company Entity; or

(b) (x) solicit or encourage any person or entity who is or, within the prior six (6) months, was a customer, producer, advertiser, distributor or supplier of any Company Entity during the Employment Period to discontinue such person's or entity's business relationship with the Company Entity; or (y) discourage any prospective customer, producer, advertiser, distributor or supplier of any Company Entity from becoming a customer, producer, advertiser, distributor or supplier of the Company Entity; or

(c) hold any interest in (whether as owner, investor, shareholder, lender or otherwise) or perform any services for (whether as employee, consultant, advisor, director or otherwise), including the service of providing advice for, a Competitive Business. For the purposes of this Agreement, a "Competitive Business" shall be any entity that directly

or through subsidiaries in which it has a controlling interest operates a cable, satellite or broadband communications system that is in direct competition with the Parent or the Company.

(d) The "Restricted Period" shall begin on the Effective Date and shall expire on the first anniversary of the Executive's termination of employment with all Company Entities.

(e) Notwithstanding Section 6.2(c) above, the Executive may own, directly or indirectly, an aggregate of not more than five percent (5%) of the outstanding shares or other equity interest in any entity that engages in a Competitive Business, so long as such ownership therein is solely as a passive investor and does not include the performance of any services (as director, employee, consultant, advisor or otherwise) to such entity.

Section 6.3 Confidential Information.

(a) *No Disclosure*. The Executive shall not, at any time (whether during or after the employment period) (x) retain or use for the benefit, purposes or account of himself or any other person or entity, or (y) disclose, divulge, reveal, communicate, share, transfer or provide access to any person or entity outside any Company Entity (other than the Parent, its shareholders, directors, officers, managers, employees, agents, counsel, investment advisers or representatives in the normal course of the performance of their duties), any non-public, proprietary or confidential information (including trade secrets, know-how, research and development, software, databases, inventions, processes, formulae, technology, designs and other intellectual property, information concerning finances, investments, profits, pricing, costs, products, services, vendors, customers, clients, partners, investors, personnel, compensation, recruiting, training, advertising, sales, marketing, promotions, government and regulatory activities and approval) concerning the past, current or future business, activities and operations of any Company Entities and/or any third party that has disclosed or provided any of same to any Company Entity on a confidential basis ("Confidential Information") without the prior authorization of the Board. Confidential Information shall not include any information that is (A) generally known to the industry or the public other than as a result of the Executive's breach of this Agreement; (B) is or was available to the Executive on a non-confidential basis prior to its disclosure to the Executive by any Company Entity, or (C) made available to the Executive by a third party who, to the best of the Executive's knowledge, is or was not bound by a confidentiality agreement with (or other confidentiality obligation to) any Company Entity or another person or entity. The Executive shall handle Confidential Information in accordance with the applicable federal securities laws.

(b) *Permitted Disclosures*. Notwithstanding the provisions of the immediately preceding clause (i), nothing in this Agreement shall preclude the Executive from (x) using any Confidential Information in any manner reasonably connected to the conduct of the business of any Company Entity; or (y) disclosing the Confidential Information to the extent required by applicable law, rule or regulation (including complying with any oral or written questions, interrogatories, requests for information or documents, subpoena, civil

investigative demand or similar process to which the Executive is subject). Nothing contained herein shall prevent the use in any formal dispute resolution proceeding (subject, to the extent possible, to a protective order) of Confidential Information in connection with the assertion or defense of any claim, charge or other dispute by or against any Company Entity or the Executive. Notwithstanding the foregoing, nothing in this Agreement prohibits or restricts the Executive from reporting possible violations of law to any governmental authority or making other disclosures that are protected under whistleblower provisions of applicable law, and the Parties acknowledge and agree that the Executive does not need the prior authorization of any Company Entity to make any such reports or disclosures and the Executive is not required to notify any Company Entity that the Executive has made such reports or disclosures. However, to the maximum extent permitted by law, the Executive agrees that if such an administrative claim is made, the Executive shall not be entitled to recover any individual monetary relief or other individual remedies from any Company Entity; provided, however, that nothing herein limits the Executive's right to receive an award for information provided to any federal, state or local government agency.

(c) *Return All Materials*. Upon termination of the Executive's employment for any reason, the Executive shall (x) cease and not thereafter commence use of any Confidential Information or intellectual property (including any patent, invention, copyright, trade secret, trademark, trade name, logo, domain name or other source indicator) owned or used by any Company Entity, (y) immediately destroy, delete, or return to the Parent (at the Parent's option) all originals and copies in any form or medium (including memoranda, books, papers, plans, computer files, letters and other data) in the Executive's possession or control (including any of the foregoing stored or located in the Executive's office, home, smartphone, laptop or other computer, whether or not such computer is property of any Company Entity) that contain Confidential Information or otherwise relate to the business of any Company Entity, except that the Executive may retain only those portions of any personal notes, notebooks and diaries that do not contain any Confidential Information; and (z) notify and fully cooperate with the Parent regarding the delivery or destruction of any other Confidential Information of which the Executive is or becomes aware; provided that nothing in this Agreement or elsewhere shall prevent the Executive from retaining and utilizing: documents relating to personal benefits, entitlements and obligations; documents relating to personal tax obligations; desk calendar, rolodex, and the like; and such other records and documents as may reasonably be approved by the Parent.

Section 6.4 Reasonableness of Covenants. The Executive acknowledges and agrees that the services to be provided by the Executive under this Agreement are of a special, unique and extraordinary nature. The Executive further acknowledges and agrees that the restrictions contained in this Article VI are necessary to prevent the use and disclosure of Confidential Information and to protect other legitimate business interests of the Company Entities. The Executive acknowledges that all of the restrictions in this Article VI are reasonable in all respects, including duration, territory and scope of activity. The Executive agrees that the restrictions contained in this Article VI shall be construed as separate agreements independent of any other provision of this Agreement or any other agreement between the Executive and any Company Entity. The Executive agrees that the existence of any claim or cause of action by the Executive against any Company Entity, whether

predicated on this Agreement or otherwise, shall not constitute a defense to the enforcement by the Parent or the Company of the covenants and restrictions in this Article VI. The Executive agrees that the restrictive covenants contained in this Article VI are a material part of the Executive's obligations under this Agreement for which the Parent and the Company have agreed to compensate the Executive as provided in this Agreement. The Restricted Period referenced above shall be tolled on a day-for-day basis for each day during which the Executive violates the provisions of the subparagraphs above in any respect, so that the Executive is restricted from engaging in the activities prohibited by the subparagraphs for the full period.

Section 6.5 Works Made for Hire.

(a) *General*. The Executive recognizes and agrees that all original works of authorship, and all inventions, discoveries, improvements and other results of creative thinking or discovery by the Executive during the Employment Period, whether the result of individual efforts or in acts in concert with others, arising in the scope of the Executive's employment, utilizing in any way any of the Confidential Information or property of any Company Entity, or otherwise relating to the business of any Company Entity, are and shall be "works made for hire" within the meaning of the United States copyright laws, to the extent applicable thereto, and in all events shall be the sole and exclusive property of a Company Entity (collectively, the "Created Works"). Without limiting the generality of the foregoing, the Created Works shall include all computer software, written materials, business processes, compilations, programs, improvements, inventions, notes, copyrightable works made, fixed, conceived, or acquired by the Executive in the scope of the Executive's employment, utilizing in any way any of the Confidential Information, or otherwise relating to the business of any Company Entity. No part of the definition of Created Works is intended to exclude the Created Works from being included among the items constituting Confidential Information.

(b) *Assignment of Created Works*. The Executive hereby fully assigns to the Parent or its designee all of the Executive's right, title and interest in and to the Created Works and all aspects thereof, including without limitation all rights to renewals, extensions, causes of action, reproduce, prepare derivative works, distribute, display, perform, transfer, make, use and sell. The Executive will, from time to time during the Employment Period and thereafter, and at any time upon the request of the Parent or its designee, execute and deliver any documents, agreements, certificates or other instruments affirming, giving effect to or otherwise perfecting the Parent's or its designee's rights in the Created Works and will provide such cooperation as the Parent or its designee shall reasonably request in connection with the protection, exploitation or perfection of its rights therein anywhere in the world.

(c) *Power of Attorney*. If the Parent or its designee is unable, after reasonable effort, to secure the Executive's signature on any application for patent, copyright, trademark or other analogous registration or other documents regarding any legal protection relating to a Created Work, whether because of the Executive's physical or mental incapacity or for any other reason whatsoever, the Executive hereby irrevocably designates and appoints the Parent and its duly authorized designees, officers and agents as the Executive's agent and

attorney-in-fact, to act for and in the Executive's behalf and stead to execute and file any such application or applications or other documents and to do all other lawfully permitted acts to further the prosecution and issuance of patent, copyright or trademark registrations or any other legal protection thereon with the same legal force and effect as if executed by the Executive.

(d) *Disclosure of Created Works*. The Executive will promptly and without reservation fully disclose any Created Works to the Parent or its designee both during the Employment Period and thereafter.

Section 6.6 Intangible Property. The Executive will not at any time during or after the Employment Period have or claim any right, title or interest in any trade name, trademark, or copyright belonging to or used by any Company Entity, it being the intention of the Parties that the Executive shall, and hereby does, recognize that the Company Entities now have and shall hereafter have and retain the sole and exclusive rights in any and all such trade names, trademarks and copyrights. The Executive shall cooperate fully with any Company Entity during the Employment Period and thereafter in the securing of trade name, patent, trademark or copyright protection or other similar rights in the United States and in foreign countries and shall give evidence and testimony and execute and deliver to the Company Entity all papers reasonably requested by it in connection therewith; provided, however that the Company shall reimburse the Executive for reasonable expenses related thereto.

ARTICLE VII
OTHER COVENANTS

Section 7.1 409A Limitations. To the extent that any payment to the Executive constitutes a "deferral of compensation" subject to Section 409A of the Code (a "409A Payment"), and such payment is triggered by the Executive's termination of employment for any reason other than death, then such 409A Payment shall not commence unless and until the Executive has experienced a "separation from service," as defined in Treasury Regulation 1.409A-1(h) ("Separation from Service"). Furthermore, if on the date of the Executive's Separation from Service, the Executive is a "specified employee," as such term is defined in Treas. Reg. Section 1.409A-1(i), as determined from time to time by the Company, then such 409A Payment shall be made to the Executive on the earlier of (i) the date that is six (6) months after the Executive's Separation from Service; or (ii) the date of the Executive's death. The 409A Payments under this Agreement that would otherwise be made during such period shall be aggregated and paid in one (1) lump sum, without interest, on the first business day following the end of the six (6) month period or following the date of the Executive's death, whichever is earlier, and the balance of the 409A Payments, if any, shall be paid in accordance with the applicable payment schedule provided in this Agreement. The intent of the parties hereto is that payments and benefits under this Agreement comply with or be exempt from Section 409A of the Code and the regulations and guidance promulgated thereunder. Accordingly, to the maximum extent permitted, this Agreement shall be interpreted to be in compliance therewith or exempt therefrom. Whenever a payment under this Agreement specifies a payment period with reference to a number of days (e.g., "paid within sixty (60) days") following the Executive's termination of employment, such payment shall commence following the Executive's Separation

from Service and the actual date of payment within the specified period shall be within the sole discretion of the Company. With respect to reimbursements (whether such reimbursements are for business expenses or, to the extent permitted under the Company's policies, other expenses) and/or in-kind benefits, in each case, that constitute deferred compensation subject to Section 409A of the Code, each of the following shall apply: (x) no reimbursement of expenses incurred by the Executive during any taxable year shall be made after the last day of the following taxable year of the Executive; (y) the amount of expenses eligible for reimbursement, or in-kind benefits provided, during a taxable year of the Executive shall not affect the expenses eligible for reimbursement, or in-kind benefits to be provided, to the Executive in any other taxable year; and (z) the right to reimbursement of such expenses or in-kind benefits shall not be subject to liquidation or exchange for another benefit.

Section 7.2 280G Matters.

(a) *Gross-Up Waiver*. The Executive hereby acknowledges and agrees that he shall have no rights to any additional payments intended to make the Executive whole for any taxes relating to "parachute payments" (as defined in Section 280G of the Code), including without limitation excise taxes imposed by Section 4999 of the Code and any related federal, state or local taxes (including without limitation any interest or penalties imposed with respect to such taxes) under any plans, agreements or arrangements, including the Grant Award Agreements by and between the Executive and the Parent and/or the Company.

(b) *Potential Reduction in Payments*. The following shall apply with respect to all plans, agreements and arrangements applicable to the Executive and shall supersede any provisions in such plans, agreements or arrangements relating to the reduction of payments or benefits in connection with Section 280G and Section 4999 of the Code.

(i) Notwithstanding any provision of this Agreement, if any portion of the payments or benefits under this Agreement, or under any other agreement with the Executive or plan of the Company or its affiliates (in the aggregate, "Total Payments"), would constitute an "excess parachute payment" and would, but for this Section 7.2, result in the imposition on the Executive of an excise tax under Section 4999 of the Code (the "Excise Tax"), then the Total Payments to be made to the Executive shall either be (i) delivered in full, or (ii) delivered in such reduced amount in the manner determined in accordance with Section 7.2(b)(ii) so that no portion of such Total Payments would be subject to the Excise Tax, whichever of the foregoing clauses (i) or (ii) results in the receipt by the Executive of the greatest benefit on an after-tax basis (taking into account the applicable federal, state and local income taxes and the Excise Tax). The determinations with respect to this Section 7.2(b) shall be made by an independent auditor (the "Auditor") paid by the Company. The Auditor shall be a nationally recognized certified public accounting firm or other professional organization that is a certified public accounting firm recognized as an expert in determinations and calculations for purposes of

Section 280G of the Code that is selected by the Parent or the Company for purposes of making the applicable determinations hereunder.

(ii) If the Auditor determines that payments or benefits included in the Total Payments shall be reduced or eliminated, such reduction or elimination shall be accomplished by applying the following principles, in order: (1) the payment or benefit with the higher ratio of the parachute payment value to present economic value (determined using reasonable actuarial assumptions) shall be reduced or eliminated before a payment or benefit with a lower ratio; (2) the payment or benefit with the later possible payment date shall be reduced or eliminated before a payment or benefit with an earlier payment date; and (3) cash payments shall be reduced prior to non-cash benefits; provided that if the foregoing order of reduction or elimination would violate Section 409A of the Code, then the reduction shall be made pro rata among the payments or benefits included in the Total Payments (on the basis of the relative present value of the parachute payments).

(iii) It is possible that after the determinations and selections made pursuant to this Section 7.2, the Executive will receive Total Payments that are, in the aggregate, either more or less than the amount provided under this Section 7.2 (hereafter referred to as an "Excess Payment" or "Underpayment," respectively). If it is established, pursuant to a final determination of a court or an Internal Revenue Service proceeding that has been finally and conclusively resolved, that an Excess Payment has been made, then the Executive shall promptly pay an amount equal to the Excess Payment to the Company (or the Parent), together with interest on such amount at the applicable federal rate (as defined in and under Section 1274(d) of the Code) from the date of the Executive's receipt of such Excess Payment until the date of such payment. In the event that it is determined by the Auditor upon request by a Party that an Underpayment has occurred, the Company shall promptly pay an amount equal to the Underpayment to the Executive, together with interest on such amount at the applicable federal rate from the date such amount would have been paid to the Executive had the provisions of this Section 7.2 not been applied until the date of such payment.

(iv) The Company agrees that, in connection with making determinations under this Section 7.2, it shall instruct the Auditor to take into account the value of any reasonable compensation for services to be rendered by the Executive in connection with making determinations with respect to Section 280G and/or Section 4999 of the Code, including the non-competition provisions applicable to the Executive under Article VI of this Agreement and any other non-competition provisions that may apply to the Executive, and the Company and the Parent agree to fully cooperate in the valuation of any such services, including any non-competition provisions.

Section 7.3 Legal Fees. The Company agrees to pay as incurred (within thirty (30) business days following the Company's receipt of an invoice from counsel), all reasonable legal

fees and expenses that the Executive incurs in connection with the negotiation and execution of this Agreement, but only up to a maximum amount of $20,000.

ARTICLE VIII
MISCELLANEOUS

Section 8.1 Waiver or Modification. Any waiver by either Party of a breach of any provision of this Agreement shall not operate as, or to be, construed to be a waiver of any other breach of such provision of this Agreement. The failure of a Party to insist upon strict adherence to any term of this Agreement on one or more occasions shall not be considered a waiver or deprive that Party of the right thereafter to insist upon strict adherence to that term or any other term of this Agreement. Neither this Agreement nor any part of it may be waived, changed or terminated orally, and any waiver, amendment or modification must be in writing and signed by each of the Parties.

Section 8.2 Successors and Assigns. The rights and obligations of the Company under this Agreement shall be binding on and inure to the benefit of the Company, its successors and permitted assigns. The rights and obligations of the Executive under this Agreement shall be binding on and inure to the benefit of the heirs and legal representatives of the Executive. The Company may assign this Agreement to a successor in interest, including the purchaser of all or substantially all of the assets of the Company, provided that the Company shall remain liable hereunder unless the assignee purchased all or substantially all of the assets of the Company. The Executive may not assign any of the Executive's duties under this Agreement.

Section 8.3 Mitigation/Offset. The Executive shall be under no obligation to seek other employment or to otherwise mitigate the obligations of the Company under this Agreement, and there shall be no offset against amounts or benefits due to the Executive under this Agreement or otherwise on account of any claim the Company or its affiliates may have against the Executive or any remuneration or other benefit earned or received by the Executive after such termination.

Section 8.4 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall, when executed, be deemed to be an original and all of which shall be deemed to be one and the same instrument; and all signatures need not appear on any one Counterpart.

Section 8.5 Governing Law; Dispute Resolution. This Agreement will be governed and construed and enforced in accordance with the laws of the State of Colorado, without regard to its conflicts of law rules, which might result in the application of laws of any other jurisdiction. Any dispute, controversy or claim, whether based on contract, tort or statute, between the Parties arising out of or relating to or in connection with this Agreement, or in any amendment, modification hereof (including, without limitation, any dispute, controversy or claim as to the validity, interpretation, enforceability or breach of this Agreement or any amendment or modification hereof) will be resolved in the state or federal courts located in the State of Colorado. The parties acknowledge that venue in such courts is proper and that those courts possess personal jurisdiction over them, to which the Parties' consent. It is agreed that service of process may be effectuated pursuant to Section 8.8 of this Agreement.

Section 8.6 Dispute Resolution. Any controversy or claim arising out of or relating to this Agreement, other than claims entitling the claimant to injunctive relief or claims or disputes arising from a violation or alleged violation by the Executive of the provisions of Article VI shall be settled exclusively by final and binding arbitration in Denver, Colorado in accordance with the Employment Arbitration Rules of the American Arbitration Association (the "AAA"), and judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction. The arbitrator

shall be selected by mutual agreement of the parties, if possible. If the parties fail to reach agreement upon appointment of an arbitrator within thirty (30) days following receipt by one party of the other party's notice of desire to arbitrate, the arbitrator shall be selected from a panel or panels of persons submitted by the AAA. The selection process shall be that which is set forth in the AAA Employment Arbitration Rules then prevailing. The costs of the arbitrator shall be borne by both parties equally; provided that each party will pay its own attorneys' fees. Either party may appeal the arbitration award and judgment thereon and, in actions seeking to vacate an award, the standard of review to be applied to the arbitrator's findings of fact and conclusions of law will be the same as that applied by an appellate court reviewing a decision of a trial court sitting without a jury. This agreement to arbitrate shall not preclude the parties from engaging in voluntary, non-binding settlement efforts including mediation.

Section 8.7 Entire Agreement. This Agreement (together with the Grant Award Agreements with respect to equity awards and the Secondment Agreement) contains the entire understanding of the Parties relating to the subject matter of this Agreement and supersedes all other prior written or oral agreements, understandings or arrangements regarding the subject matter hereof. The Parties each acknowledge that, in entering into this Agreement, such Party does not rely on any statements or representations not contained in this Agreement or the Secondment Agreement or in the Grant Award Agreements.

Section 8.8 Severability. Any term or provision of this Agreement which is determined to be invalid or unenforceable by any court of competent jurisdiction in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity or unenforceability without rendering invalid or unenforceable the remaining terms and provisions of this Agreement or affecting the validity or enforceability of any of the terms or provisions of this Agreement in any other jurisdiction and such invalid or unenforceable provision shall be modified by such court so that it is enforceable to the extent permitted by applicable law.

Section 8.9 Notices. Except as otherwise specifically provided in this Agreement, all notices and other communications required or permitted to be given under this Agreement shall be in writing and delivery thereof shall be deemed to have been made (i) three (3) business days following the date when such notice shall have been deposited in first class mail, postage prepaid, return receipt requested, or any comparable or superior postal or air courier service then in effect, or (ii) on the date transmitted by hand delivery to the Party entitled to receive the same, at the address indicated below or at such other address as such Party shall have specified by written notice to the other Parties given in accordance with this Section 8.9:

If to the Company:

Liberty Global, Inc.
Attn: General Counsel
1550 Wewatta Street, Suite 1000
Denver, CO 80202
Tel: 303-220-6600

If to the Executive: At the address then on file with the Company.

Section 8.10 No Third Party Beneficiaries. Except as provided in Section 5.1(c) in the event of the Executive’s death or Disability, this Agreement does not create, and shall not be construed as creating, any rights enforceable by any person not a party to this Agreement.

Section 8.11 Survival. The covenants, agreements, representations and warranties contained in this Agreement shall survive the termination of the employment period and the Executive’s termination of employment with the Company for any reason.

[Remainder of page blank; Signature page follows]

IN WITNESS WHEREOF, this Agreement has been executed and delivered by the Parties as of the first date written above, but effective as of the Effective Date.

LIBERTY GLOBAL, INC.

By:__
Bryan H. Hall
Executive Vice President

EXECUTIVE

Enrique Rodriguez

[Signature Page to Employment Agreement]

EXHIBIT A

WAIVER AND RELEASE AGREEMENT

I, **[NAME]**, do freely and voluntarily enter into this WAIVER AND RELEASE AGREEMENT (this “Agreement”), intending to be legally bound, according to the terms set forth below. I acknowledge that my employment with any and all of **[___________________]** (collectively, the “Company”), and their affiliates (together with the Company, the “Employer”) has been terminated as of _____________________ (the “Termination Date”).

I acknowledge that my Employer has agreed to provide me certain benefits (the “Benefits”) pursuant to Section (__) of that certain Employment Agreement between _________, and me effective as of ________ (the “Employment Agreement”). Such Benefits shall be provided in accordance with the terms and conditions of the Employment Agreement.

I understand that the Company will not deduct from the Benefits any employee contributions to the [Liberty Global 401(k) Savings and Stock Ownership Plan] (the “Plan”).

For this valuable consideration, I hereby agree and state as follows:

1. I, individually and on behalf of my successors, heirs and assigns, release, waive and discharge Employer, and any of its parents, subsidiaries, or otherwise affiliated corporations, partnerships or business enterprises, and their respective present and former directors, officers, shareholders, employees, and assigns (hereinafter, "Released Parties"), from any and all causes of action, claims, charges, demands, losses, damages, costs, attorneys' fees and liabilities of any kind that I may have or claim to have relating to my employment relationship with the Employer, including my service as a director of the Company, or the termination thereof, relating to or arising out of any act of commission or omission from the beginning of time through the date of my execution of this Agreement; provided, however, nothing contained herein shall release any claim I may have: (i) for indemnification under Employer's constituent documents or any other agreement that I have with any of the Released Parties; (ii) for unemployment compensation benefits; (iii) to enforce the obligations of Employer set forth in the Employment Agreement; (iv) to vested amounts held in my name in accordance with the conditions and terms of any plan, program or arrangement sponsored or maintained by any of the Released Parties, including, without limitation the Plan and any nonqualified deferred compensation plan; (v) to outstanding equity awards granted to me (collectively, the "Grants"), which shall be subject to the terms and conditions of the applicable incentive plan and the agreement evidencing the respective Grant, as modified by the Employment Agreement; (vi) to benefits under any employee benefit plan maintained or sponsored by any of the Released Parties, including health care continuation under COBRA; or (vii) to rights as a shareholder of the Company.

2. This release includes, but is not limited to, the following claims, and shall apply to claims made in the United States, the United Kingdom, and/or any country or territory where such a claim can be made:

   a. Claims under federal, state, local or foreign laws prohibiting age, sex, race, national origin, disability, religion, sexual orientation, marital status, retaliation, or any other form of discrimination, or mistreatment, such as, but not limited to, the Age Discrimination in Employment Act, (29 U.S.C. §621 et seq), Title VII of the Civil Rights Act of 1964, the Civil Rights Act of 1991, 42 U.S.C. §1981, §1985, §1986, the Americans with Disabilities Act, and the National Labor Relations Act, as amended, 29 U.S.C. §151, et seq;

   b. Intentional or negligent infliction of emotional distress, defamation, invasion of privacy, and other tort claims;

   c. Breach of express or implied contract claims;

   d. Promissory estoppel claims;

   e. Retaliatory discharge claims;

   f. Wrongful discharge claims;

   g. Breach of any express or implied covenant of good faith and fair dealing;

   h. Constructive discharge;

   i. Claims arising out of or related to any applicable federal, state or foreign constitutions;

   j. Claims for compensation, including without limitation, any wages, bonus payments, on call pay, overtime pay, commissions, and any other claim pertaining to local, state, federal or foreign wage and hour or other compensation laws, such as, but not limited to, the Worker Adjustment and Retraining Notification Act, 29 U.S.C. §2101, et seq, and the Fair Labor Standards Act, as amended, 29 U.S.C. §201, et seq.;

   k. Fraud, misrepresentation, and/or fraudulent inducement;

   l. Claims made under or pursuant to any severance plan or program maintained by any of the Released Parties;

   m. Claims of breach of any data privacy or similar laws in connection with the handling or investigation of any whistleblower complaints or any other investigation by Employer or its representatives; and

   n. Other legal and equitable claims regarding my employment or the termination of my employment, other than as set forth herein.

3. I hereby warrant and represent that I have not filed or caused to be filed any charge or claim against any Released Party with any administrative agency, court of law or other tribunal. I agree that I am not entitled to any remedy or relief if I were to pursue any such claim, complaint or charge.

4. I hereby acknowledge that I am age forty (40) or older.

5. BY SIGNING THIS AGREEMENT, I ACKNOWLEDGE THAT EMPLOYER HAS ADVISED ME TO DISCUSS THIS WAIVER AND RELEASE AGREEMENT WITH AN ATTORNEY BEFORE SIGNING THIS AGREEMENT. I acknowledge and agree that the Released Parties are not responsible for any of my costs, expenses, and attorney's fees, if any, incurred in connection with any claim or the review and signing of this Agreement.

6. I acknowledge and state that I have been given a period of at least twenty-one (21) days in which to consider the terms of this Agreement.

7. I understand that I have the right to revoke this Agreement at any time within **seven (7) days** after signing it, by providing **written notice** to the Company, Attn. General Counsel at 1550 Wewatta Street, Denver, CO 80202, and this Agreement is not effective or enforceable until the seven (7) day revocation period has expired. In the event I revoke this Agreement, the Company shall have no obligation to provide me the Benefits. I understand that failure to revoke my acceptance of this Agreement will result in this Agreement being permanent and irrevocable.

8. I agree that this Agreement is a compromise of claims and charges and/or potential claims and charges which are or may be in dispute, and that this Agreement does not constitute an admission of liability or an admission against interest of any Released Party.

9. Nothing herein prohibits or prevents me from filing a charge with or participating, testifying or assisting in any investigation, hearing,

whistleblower action or other proceeding before any federal, state or local government agency, nor does anything herein preclude, prohibit or otherwise limit, in any way, my rights and abilities to contact, communicate with, report matters to or otherwise participate in any whistleblower program administered by any such agencies. Pursuant to the Defend Trade Secrets Act of 2016, I understand that I shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of any confidential information of the Company that (i) is made (A) in confidence to a federal, state or local government official, either directly or indirectly, or to an attorney and (B) solely for the purpose of reporting or investigating a suspected violation of law or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

10. This Agreement is made and is effective as of the date first written below.

11. This Agreement becomes null and void and has no further force or effect if Employer does not receive the executed Agreement by 5:00 p.m., Mountain Time, __________, 20___.

IN WITNESS WHEREOF, I have placed my signature this ____ day of _________, 20___.

EXECUTIVE:

[NAME]

Exhibit 31.1

CERTIFICATION

I, Michael T. Fries, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Liberty Global plc;
2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;
3. Based on my knowledge, the financial statements, and other financial information included in this quarterly report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this quarterly report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we have:
   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this quarterly report based on such evaluation; and
   d) Disclosed in this quarterly report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):
   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 8, 2018

/s/ Michael T. Fries

Michael T. Fries
President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Charles H.R. Bracken, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Liberty Global plc;
2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;
3. Based on my knowledge, the financial statements, and other financial information included in this quarterly report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this quarterly report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we have:
    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly report is being prepared;
    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this quarterly report based on such evaluation; and
    d) Disclosed in this quarterly report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):
    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 8, 2018

/s/ Charles H.R. Bracken

Charles H.R. Bracken

Executive Vice President and Chief Financial Officer

Exhibit 32

Certification
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), each of the undersigned officers of Liberty Global plc (the "Company"), does hereby certify, to such officer's knowledge, that:

The Quarterly Report on Form 10-Q for the period ended June 30, 2018 (the "Form 10-Q") of the Company fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company as of June 30, 2018 and December 31, 2017, and for the three and six months ended June 30, 2018 and 2017.

Dated: August 8, 2018

/s/ Michael T. Fries
Michael T. Fries
President and Chief Executive Officer

Dated: August 8, 2018

/s/ Charles H.R. Bracken
Charles H.R. Bracken
Executive Vice President and Chief Financial Officer

The foregoing certification is being furnished solely pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code) and is not being filed as part of the Form 10-Q or as a separate disclosure document.