

PRESS RELEASE



Liberty Global Reports Full Year 2019 Results

Exceeded full-year FCF guidance; achieved all other guidance targets

Record year for share repurchases with \$3.2 billion spent in 2019

2019 operating income down 11% YoY for continuing operations

Full-year OFCF¹ grew 35% YoY fueled by 22% decrease in capital intensity

Denver, Colorado: February 13, 2020

Liberty Global plc today announced its full-year 2019 and Q4 2019 financial results. Our former operations in Austria, Germany, Hungary, Romania and the Czech Republic, along with our DTH business (collectively, the "Discontinued Operations") have been accounted for as discontinued operations. Unless otherwise indicated, the information in this release relates only to our continuing operations.

CEO Mike Fries stated, "2019 was a transformational year on many fronts. In July, we sold our operations in Germany, Hungary, Romania and the Czech Republic to Vodafone for over \$21 billion. We are now geographically concentrated in five attractive Western European markets, while enjoying substantial financial firepower with over \$11 billion of total liquidity.

Technologically, we continued to push the boundaries of our fiber-rich HFC networks by accelerating our gigabit broadband rollouts to more European homes and businesses. As a result, millions of our customers currently have access to 1 gigabit download speeds, far surpassing what our competitors are able to offer across the vast majority of our footprint.

In the U.K., our largest market, our focus on fixed-mobile convergence drove record mobile subscription growth in 2019. Last fall, we announced a transformational MVNO deal with Vodafone, which will allow Virgin Media to launch 5G mobile speeds. Combined with our fixed-line gigabit broadband speeds, our cutting-edge FMC bundles place us in an enviable position as we continue to extend the reach of our network with Project Lightning. And while we expect some unavoidable headwinds in 2020, we believe the medium-term outlook in the U.K. remains attractive, especially as we evaluate strategic options for value creation. From a leadership perspective, we recently appointed Severina Pascu as CFO and Deputy CEO of Virgin Media, and expect her depth of operating expertise to make a significant impact over the coming years.

In Switzerland, we are encouraged by the continued success of our turnaround plan. In January, we announced the appointment of Baptist Coopmans as the incoming CEO of UPC Switzerland. He brings a wealth of experience to this important role. Meanwhile, we continue to believe the Swiss market remains ripe for fixed-mobile convergence over the medium term, and in addition to our organic growth, we will consider other strategic options in due course.



Looking ahead to 2020, for the full year we are forecasting a mid-single-digit rebased¹ OCF decline, mid-single-digit rebased¹ OFCF growth and approximately \$1 billion of Adjusted FCF², which represents 30% year-over-year growth. Also, our Board of Directors has authorized a new \$1 billion share repurchase plan."

Full Year and Q4 Highlights *(on a continuing operations basis unless otherwise noted)*

- FY and Q4 rebased¹ revenue decreased 0.6% and 0.5%, respectively
 - Q4 residential cable revenue³ decreased 0.9% YoY to \$1,902.1 million
 - Results driven by revenue contractions in Switzerland, Belgium and U.K./Ireland
 - Q4 residential mobile revenue³ increased 5.2% YoY to \$429.9 million
 - Performance driven by strong Swiss result
 - Q4 B2B⁵ revenue³ decreased 0.8% YoY to \$490.9 million
 - Strong growth in Switzerland and CEE offset by declines at our other operations
- FY operating income decreased 11.2% YoY to \$745.5 million
 - Q4 operating income increased 12.0% YoY to \$282.5 million
- FY rebased¹ OCF⁴ declined 3.1% to \$4,859.5 million, including a 4.1% decrease in Q4
- Q4 property & equipment additions spend at 28.2% of revenue as compared to 32.9% in Q4 2018
- Built 191,000 new premises during Q4, including 154,000 new premises in the U.K. & Ireland
- Solid balance sheet with \$11.1 billion of liquidity⁶ at Q4
- Net leverage⁷ of 3.7x at Q4
- Fully-swapped borrowing cost of 4.1% on debt balance of \$27.6 billion

Liberty Global <i>(continuing operations)</i>	Q4 2019	YoY Growth ⁽ⁱ⁾	YTD 2019	YoY Growth ⁽ⁱ⁾
Subscribers				
Organic Net RGU Losses	(128,300)		(208,700)	
Organic Customer Losses	(25,500)		(73,900)	
Financial <i>(in millions, except percentages)</i>				
Revenue	\$ 2,982.2	(0.5%)	\$ 11,541.5	(0.6%)
Operating income	\$ 282.5	12.0%	\$ 745.5	(11.2%)
OCF	\$ 1,273.8	(4.1%)	\$ 4,859.5	(3.1%)
P&E additions	\$ 840.4	(13.5%)	\$ 2,880.5	(22.3%)
OCF	\$ 433.4	18.2%	\$ 1,979.0	34.5%
Cash provided by operating activities	\$ 1,493.9		\$ 3,714.1	
Cash provided (used) by investing activities	\$ (268.3)		\$ 9,541.0	
Cash used by financing activities	\$ (487.5)		\$ (6,922.3)	
Adjusted FCF ⁸ Pro forma continuing operations ⁽ⁱⁱ⁾	\$ 774.7		\$ 770.1	

(i) Revenue, OCF and OFCF YoY growth rates are on a rebased basis

(ii) Pro forma Adjusted FCF gives pro forma effect to certain adjustments to our recurring cash flows that we have or expect to realize following the disposition of the Discontinued Operations. For additional details, see the information and reconciliation included within the Glossary. Based on reported Adjusted FCF including PF Adjustments



Customer and Subscriber Growth

	Three months ended		Year ended	
	December 31,		December 31,	
	2019	2018	2019	2018
Organic customer net additions (losses) by market				
U.K./Ireland	(9,400)	9,000	7,100	72,400
Belgium	(6,900)	(20,700)	(42,900)	(75,400)
Switzerland	(22,700)	(32,000)	(73,600)	(121,000)
Continuing CEE (Poland and Slovakia)	13,500	17,600	35,500	12,900
Total	<u>(25,500)</u>	<u>(26,100)</u>	<u>(73,900)</u>	<u>(111,100)</u>
Organic RGU net additions (losses) by market				
U.K./Ireland	(110,900)	23,500	(109,300)	285,900
Belgium	(18,600)	(54,400)	(110,300)	(154,200)
Switzerland	(34,300)	(48,600)	(119,300)	(187,600)
Continuing CEE (Poland and Slovakia)	35,500	47,000	130,200	85,900
Total	<u>(128,300)</u>	<u>(32,500)</u>	<u>(208,700)</u>	<u>30,000</u>
Organic RGU net additions (losses) by product				
Data	15,700	24,800	78,500	98,100
Video	(91,300)	(74,900)	(272,400)	(160,400)
Voice	(52,700)	17,600	(14,800)	92,300
Total	<u>(128,300)</u>	<u>(32,500)</u>	<u>(208,700)</u>	<u>30,000</u>
Organic Mobile SIM additions (losses) by product				
Postpaid	130,500	73,800	496,000	328,700
Prepaid	(43,000)	(40,500)	(157,500)	(163,400)
Total	<u>87,500</u>	<u>33,300</u>	<u>338,500</u>	<u>165,300</u>
Organic Mobile SIM additions by market				
U.K./Ireland	42,100	17,400	153,700	68,300
Belgium	29,500	7,500	124,500	66,300
Other	15,900	8,400	60,300	30,700
Total	<u>87,500</u>	<u>33,300</u>	<u>338,500</u>	<u>165,300</u>

- **Customer Relationships:** During Q4 we lost 26,000 customer relationships, representing a slight year-over-year improvement
- **U.K./Ireland:** U.K./Ireland lost 9,000 customer relationships in Q4, as growth from new build areas was offset by attrition in the non-Lightning footprint as competitor discounting increased
- **Belgium:** Q4 losses of 7,000 customer relationships was a significant year-over-year improvement as compared to a loss of 21,000 in Q4 2018, primarily driven by successful quad-play bundles and end-of-year promotional campaigns
- **Switzerland:** Customer attrition of 23,000 in Q4 represents a strong year-over-year improvement, primarily driven by lower churn. Q4 volumes are generally impacted by annual billing cycles
- **Continuing CEE (Poland and Slovakia):** CEE added 14,000 customer relationships in Q4, as customer growth from new build areas has been largely in-line year-over-year



- **Mobile Subscribers:** Added 88,000 mobile subscribers in Q4, as 131,000 postpaid additions were only partially offset by continued attrition in our low-ARPU prepaid base
 - Q4 U.K./Ireland postpaid mobile net adds of 76,000 were supported by the launch of our FMC bundles which drove an acceleration in Virgin Media's fixed-mobile converged penetration to 21.2% in Q4
 - Belgium added 30,000 mobile subscribers during Q4, including 39,000 net postpaid additions. This growth was supported by our converged WIGO offering
 - Switzerland added 12,000 mobile subscribers in Q4 driven by bundling success and a revamped mobile offer following our MVNO switch in January 2019

Revenue Highlights

The following table presents (i) revenue of each of our consolidated reportable segments for the comparative periods and (ii) the percentage change from period to period on both a reported and rebased basis:

Revenue	Three months ended				Year ended			
	December 31,		Increase/(decrease)		December 31,		Increase/(decrease)	
	2019	2018	%	Rebased %	2019	2018	%	Rebased %
in millions, except % amounts								
Continuing operations:								
U.K./Ireland	\$ 1,715.1	\$ 1,694.3	1.2	1.3	\$ 6,600.3	\$ 6,875.1	(4.0)	0.4
Belgium	746.0	733.3	1.7	(0.7)	2,893.0	2,993.6	(3.4)	(1.2)
Switzerland	316.1	325.6	(2.9)	(3.5)	1,258.8	1,326.0	(5.1)	(3.5)
Continuing CEE	120.0	119.1	0.8	3.5	475.4	492.2	(3.4)	2.7
Central and Corporate	85.0	76.8	10.7	(21.8)	316.4	274.2	15.4	(9.5)
Intersegment eliminations	—	—	N.M.	N.M.	(2.4)	(3.2)	N.M.	N.M.
Total continuing operations...	\$ 2,982.2	\$ 2,949.1	1.1	(0.5)	\$ 11,541.5	\$ 11,957.9	(3.5)	(0.6)

N.M. - Not Meaningful

- Reported revenue for the three months and year ended December 31, 2019 increased 1.1% and decreased 3.5% year over year, respectively
 - The full-year result was primarily driven by the impact of (i) negative foreign exchange ("FX") movements, mainly related to the weakening of the British Pound and Euro against the U.S. dollar, and (ii) organic revenue contraction
- Rebased revenue declined 0.5% and 0.6% in the Q4 and YTD periods, respectively. This result included:
 - Favorable impact of \$2.2 million and \$7.8 million for Q4 and YTD, respectively, related to revenue recognized by Virgin Media in connection with the sale of rights to future commission payments on customer handset insurance arrangements



Q4 2019 Rebased Revenue Growth - Segment Highlights

- U.K./Ireland: Rebased revenue increased 1.3% in Q4 driven by the net effect of (i) an increase in residential cable revenue due to an increase in cable ARPU, partially offset by a decline in cable RGUs and a decrease in cable non-subscription revenue, (ii) an increase in residential mobile revenue driven by the take-up of higher-value postpaid data bundles and the aforementioned revenue benefit arising from the sale of future commission payments on customer handset insurance arrangements and (iii) a decline in B2B revenue due to a reduction in revenue from data services, equipment sales and installations, which offset the benefit of dark fibre wholesale contract wins in the quarter and an increase in subscription revenue due to growth in SOHO RGUs
- Belgium: Rebased revenue declined 0.7% in Q4 driven by the net effect of (i) lower B2B non-subscription revenue driven by a decrease in revenue from wholesale services and interconnect revenue, (ii) an increase in B2B subscription revenue due to an increase in SOHO RGUs, (iii) lower residential cable revenue driven by a decrease in subscribers, partially offset by higher ARPU and (iv) an increase in mobile revenue due to higher revenue from the sale of mobile handsets and other devices
- Switzerland: Rebased revenue declined 3.5% YoY in Q4 primarily due to the net effect of (i) a decrease in residential cable subscription revenue driven by subscriber volume loss and lower ARPU (ii) an increase in mobile revenue driven by an increase in both subscribers and handset sales
- Continuing CEE (Poland and Slovakia): Rebased revenue grew 3.5% YoY in Q4 due to an increase in residential cable subscription revenue driven by new build areas
- Central and Corporate: Rebased revenue decreased 21.8% in Q4 primarily due to a decrease in CPE sales to the VodafoneZiggo JV. Commencing in Q3, TSA revenue received from Vodafone has been rebased

Operating Income

- Operating income was \$282.5 million and \$252.2 million in Q4 2019 and Q4 2018, respectively, representing an increase of 12.0% YoY. For the year ended December 31, 2019, our operating income of \$745.5 million reflects a decrease of 11.2% as compared to \$839.1 million for the 2018 period
- The changes in operating income in the QTD and YTD periods primarily resulted from the net effect of (i) lower OCF, as further described below, (ii) decreases in depreciation and amortization expense, (iii) increases in share-based compensation expense and (iv) lower impairment, restructuring and other operating items, net



Operating Cash Flow Highlights

The following table presents (i) OCF of each of our consolidated reportable segments for the comparative periods, and (ii) the percentage change from period to period on both a reported and rebased basis:

OCF	Three months ended				Year ended			
	December 31,		Increase/(decrease)		December 31,		Increase/(decrease)	
	2019	2018	%	Rebased %	2019	2018	%	Rebased %
in millions, except % amounts								
Continuing operations:								
U.K./Ireland	\$ 763.0	\$ 773.3	(1.3)	(1.4)	\$ 2,800.5	\$ 2,995.5	(6.5)	(2.3)
Belgium	339.1	355.3	(4.6)	(4.1)	1,386.1	1,480.0	(6.3)	(2.0)
Switzerland	151.6	174.0	(12.9)	(13.1)	627.9	712.0	(11.8)	(10.3)
Continuing CEE	52.5	60.0	(12.5)	(10.7)	215.0	233.6	(8.0)	(2.3)
Central and Corporate	(32.4)	(60.7)	46.6	(0.8)	(171.1)	(257.8)	33.6	3.5
Intersegment eliminations	—	(0.3)	N.M.	N.M.	1.1	(11.8)	N.M.	N.M.
Total continuing operations ...	<u>\$ 1,273.8</u>	<u>\$ 1,301.6</u>	<u>(2.1)</u>	<u>(4.1)</u>	<u>\$ 4,859.5</u>	<u>\$ 5,151.5</u>	<u>(5.7)</u>	<u>(3.1)</u>

N.M. - Not Meaningful

- Reported OCF for the three months and year ended December 31, 2019 decreased 2.1% and 5.7% year over year, respectively
 - The YTD result was primarily driven by (i) the aforementioned negative impact of FX movements and (ii) an organic OCF decline
- Our rebased OCF decline of 4.1% and 3.1% in the Q4 and YTD periods, respectively, included:
 - The aforementioned favorable impacts of certain items of our revenue, as discussed in the "Revenue Highlights" section above
 - The following current year impacts:
 - Unfavorable network tax increases of \$12.6 million and \$42.2 million for Q4 and YTD, respectively, following an increase in the rateable value of our U.K. networks, which is being phased in over a six-year period ending in 2022
 - For the YTD period, higher severance costs in U.K./Ireland of \$6.7 million
 - For the YTD period, an unfavorable increase in personnel costs in Central and Corporate recorded during the second quarter of 2019 related to a \$5.0 million cash bonus associated with the renewal of an existing executive employment contract on similar terms
 - The following prior year impacts:
 - Lower costs of \$2.6 million and \$9.4 million for the Q4 and YTD periods, respectively, due to the reassessment of an accrual in U.K./Ireland in 2018



- For the YTD period, higher costs of \$5.3 million due to the impact of a credit recorded during the second quarter of 2018 in connection with a telecommunications operator's agreement to compensate Virgin Media and other communications providers for certain prior-period contractual breaches related to network charges

Q4 2019 Rebased Operating Cash Flow Growth - Segment Highlights

- U.K./Ireland:** Rebased OCF decline of 1.4% reflects the aforementioned revenue performance which was more than offset by a net increase in our cost base due to (i) a \$12.6 million net increase in network taxes, (ii) a reduction in B2B cost of sales, (iii) higher mobile data costs, (iv) higher marketing spend and (v) an increase in programming costs
- Belgium:** Rebased OCF decline of 4.1% was largely driven by the Mediaaan MVNO contract loss, certain regulatory headwinds and higher programming costs
- Switzerland:** Rebased OCF declined 13.1% in Q4, largely due to (i) the aforementioned loss of residential cable subscription revenue and (ii) higher interconnect and roaming costs
- Continuing CEE (Poland and Slovakia):** Rebased Segment OCF decreased 10.7% in Q4, as an increase in programming and project related external spend was only partially offset by the aforementioned increase in residential cable subscription revenue

OFCF Highlights

The following table presents (i) OFCF of each of our consolidated reportable segments for the comparative periods and (ii) the percentage change from period to period on a rebased basis:

OFCF	Three months ended			Year ended		
	December 31,		Rebased %	December 31,		Rebased %
	2019	2018		2019	2018	
in millions, except % amounts						
Continuing operations:						
U.K./Ireland	\$ 313.5	\$ 280.2	11.9	\$ 1,222.5	\$ 1,006.6	26.4
Belgium	193.6	129.1	49.3	848.9	689.2	27.8
Switzerland	80.9	89.3	(9.1)	350.0	462.4	(22.8)
Continuing CEE	11.7	6.3	93.4	108.0	80.8	42.7
Central and Corporate	(166.3)	(174.4)	(20.9)	(551.5)	(781.3)	18.1
Intersegment eliminations	—	(0.3)	N.M.	1.1	(11.8)	N.M.
Total continuing operations	\$ 433.4	\$ 330.2	18.2	\$ 1,979.0	\$ 1,445.9	34.5

Net Earnings (Loss) Attributable to Liberty Global Shareholders

- Net earnings (loss) attributable to Liberty Global shareholders was (\$1,386.5 million) and \$25.1 million for the three months ended December 31, 2019 and 2018, respectively, and \$11,521.4 million and \$725.3 million for the year ended December 31, 2019 and 2018, respectively. The earnings during the year ended December 31, 2019 includes a \$12.2 billion gain on the sale of our operations in Germany, Hungary, Romania and the Czech Republic recognized during the third quarter of 2019.



Leverage and Liquidity

- Total principal amount of debt and finance leases: \$28.3 billion for continuing operations
- Leverage ratios⁷: At December 31, 2019, our adjusted gross and net leverage ratios were 5.4x and 3.7x, respectively
- Average debt tenor⁹: Approximately 7 years, with ~74% not due until 2025 or thereafter for continuing operations
- Borrowing costs: Blended fully-swapped borrowing cost of our debt was 4.1% for continuing operations
- Liquidity⁶: \$11.1 billion for our continuing operations, including (i) \$8.1 billion of cash at December 31, 2019 and (ii) aggregate unused borrowing capacity¹⁰ under our credit facilities of \$3.0 billion.



Share Repurchase Program

As announced today, our Board of Directors has authorized a new \$1 billion share repurchase program. Under the program, Liberty Global may acquire from time to time its Class A ordinary shares, Class C ordinary shares, or any combination of Class A and Class C ordinary shares. The program may be effected through open market transactions and/or privately negotiated transactions, which may include derivative transactions. The timing of the repurchase of shares pursuant to the program will depend on a variety of factors, including market conditions and applicable law. The program may be implemented in conjunction with brokers for the Company and other financial institutions with whom the Company has relationships within certain pre-set parameters and purchases may continue during closed periods in accordance with applicable restrictions. The program may be suspended or discontinued at any time.

Forward-Looking Statements and Disclaimer

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements with respect to our strategies, future growth prospects and opportunities; expectations with respect to our rebased OCF decline, our rebased OFCF growth and our Adjusted FCF; expectations with respect to our share repurchase plan; expected launch of 5G speeds at Virgin Media; anticipated headwinds in 2020; our medium-term outlook in the U.K. as well as in Switzerland; expected impacts of new leadership at Virgin Media and in Switzerland; expectations with respect to the development, launch and benefits of our innovative and advanced products and services; the strength of our balance sheet and tenor of our third-party debt; and other information and statements that are not historical fact. These forward-looking statements involve certain risks and uncertainties that could cause actual results to differ materially from those expressed or implied by these statements. These risks and uncertainties include events that are outside of our control, such as the continued use by subscribers and potential subscribers of our and our affiliates' services and their willingness to upgrade to our more advanced offerings; our and our affiliates' ability to meet challenges from competition, to manage rapid technological change or to maintain or increase rates to subscribers or to pass through increased costs to subscribers; the effects of changes in laws or regulation; the effects of the U.K.'s exit from the E.U.; general economic factors; our and our affiliates' ability to obtain regulatory approval and satisfy regulatory conditions associated with acquisitions and dispositions; our and affiliates' ability to successfully acquire and integrate new businesses and realize anticipated efficiencies from acquired businesses; the availability of attractive programming for our and our affiliates' video services and the costs associated with such programming; our and our affiliates' ability to achieve forecasted financial and operating targets; the outcome of any pending or threatened litigation; the ability of our operating companies and affiliates to access cash of their respective subsidiaries; the impact of our operating companies' and affiliates' future financial performance, or market conditions generally, on the availability, terms and deployment of capital; fluctuations in currency exchange and interest rates; the ability of suppliers, vendors and contractors to timely deliver quality products, equipment, software, services and access; our and our affiliates' ability to adequately forecast and plan future network requirements including the costs and benefits associated with network expansions; and other factors detailed from time to time in our filings with the Securities and Exchange Commission, including our most recently filed Form 10-K. These forward-looking statements speak only as of the date of this release. We expressly disclaim any obligation or undertaking to disseminate any updates or revisions to any forward-looking statement contained herein to reflect any change in our expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

About Liberty Global

Liberty Global (NASDAQ: LBTYA, LBTYB and LBTYK) is one of the world's leading converged video, broadband and communications companies, with operations in six European countries under the consumer brands Virgin Media, Telenet and UPC. We invest in the infrastructure and digital platforms that empower our customers to make the most of the digital revolution. Our substantial scale and commitment to innovation enable us to develop market-leading products delivered through next-generation networks that connect 11 million customers subscribing to 25 million TV, broadband internet and telephony services. We also serve 6 million mobile subscribers and offer WiFi service through millions of access points across our footprint.

In addition, Liberty Global owns 50% of VodafoneZiggo, a joint venture in the Netherlands with 4 million customers subscribing to 10 million fixed-line and 5 million mobile services, as well as significant investments in ITV, All3Media, ITI Neovision, Lionsgate, the Formula E racing series and several regional sports networks. For more information, please visit www.libertyglobal.com or contact:

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Balance Sheets, Statements of Operations and Statements of Cash Flows

The consolidated balance sheets, statements of operations and statements of cash flows of Liberty Global are in our 10-K.

Rebase Information

For purposes of calculating rebased growth rates on a comparable basis for all businesses that we owned during 2019, we have adjusted our historical revenue, OCF and OFCF for the three months and year ended December 31, 2018 to (i) include the pre-acquisition revenue, OCF and P&E additions of entities acquired during 2019 in our rebased amounts for the three months and year ended December 31, 2018 to the same extent that the revenue, OCF and P&E additions of these entities are included in our results for the three months and year ended December 31, 2019, (ii) include revenue and costs for the temporary elements of transitional and other services provided to the VodafoneZiggo JV, Vodafone, Deutsche Telekom (the buyer of UPC Austria), Liberty Latin America and M7 Group (the buyer of UPC DTH), to reflect amounts related to these services equal to those included in our results for the three months and year ended December 31, 2019 and (iii) reflect the translation of our rebased amounts for the three months and year ended December 31, 2018 at the applicable average foreign currency exchange rates that were used to translate our results for the three months and year ended December 31, 2019. We have reflected the revenue, OCF and P&E additions of these acquired entities in our 2018 rebased amounts based on what we believe to be the most reliable information that is currently available to us (generally pre-acquisition financial statements), as adjusted for the estimated effects of (a) any significant differences between U.S. GAAP and local generally accepted accounting principles, (b) any significant effects of acquisition accounting adjustments, (c) any significant differences between our accounting policies and those of the acquired entities and (d) other items we deem appropriate. We do not adjust pre-acquisition periods to eliminate nonrecurring items or to give retroactive effect to any changes in estimates that might be implemented during post-acquisition periods. As we did not own or operate the acquired businesses during the pre-acquisition periods, no assurance can be given that we have identified all adjustments necessary to present the revenue, OCF and OFCF of these entities on a basis that is comparable to the corresponding post-acquisition amounts that are included in our historical results or that the pre-acquisition financial statements we have relied upon do not contain undetected errors. The adjustments reflected in our rebased amounts have not been prepared with a view towards complying with Article 11 of Regulation S-X. In addition, the rebased growth percentages are not necessarily indicative of the revenue, OCF and OFCF that would have occurred if these transactions had occurred on the dates assumed for purposes of calculating our rebased amounts or the revenue, OCF and OFCF that will occur in the future. The rebased growth percentages have been presented as a basis for assessing growth rates on a comparable basis, and are not presented as a measure of our pro forma financial performance.

The following table provides adjustments made to the 2018 amounts to derive our rebased growth rates for our continuing operations:

	Revenue		OCF		OCF	
	Three months ended December 31,	Year ended December 31,	Three months ended December 31,	Year ended December 31,	Three months ended December 31,	Year ended December 31,
	2018	2018	2018	2018	2018	2018
	in millions					
Acquisitions	\$ 40.7	\$ 96.9	\$ 9.1	\$ 14.6	\$ 9.1	\$ 12.2
Dispositions ⁽ⁱ⁾	33.4	87.7	27.7	71.3	27.7	71.3
Foreign Currency	(27.4)	(531.6)	(10.8)	(225.0)	(0.3)	(58.4)
Total increase (decrease)	\$ 46.7	\$ (347.0)	\$ 26.0	\$ (139.1)	\$ 36.5	\$ 25.1

⁽ⁱ⁾ Includes rebase adjustments related to agreements to provide transitional and other services to the VodafoneZiggo JV, Vodafone, Liberty Latin America, Deutsche Telekom and M7 Group. These adjustments result in an equal amount of fees in both the 2019 and 2018 periods for those services that are deemed to be temporary in nature. The net amount of these adjustments resulted in increases in revenue of \$33.6 million and \$88.4 million and OCF of \$28.0 million and \$73.9 million for the three months and year ended December 31, 2018, respectively.



Summary of Debt, Finance Lease Obligations & Cash and Cash Equivalents

The following table⁽ⁱ⁾ details the U.S. dollar equivalent balances of the outstanding principal amount of our continuing operations debt, finance lease obligations and cash and cash equivalents at December 31, 2019:

	Debt^{(ii), (iii)}	Finance Lease Obligations	Debt & Finance Lease Obligations	Cash and Cash Equivalents
	in millions			
Liberty Global and unrestricted subsidiaries.....	\$ 1,689.7	\$ 50.2	\$ 1,739.9	\$ 7,957.9
Virgin Media ^(iv)	15,854.9	70.1	15,925.0	45.7
UPC Holding	4,335.0	22.8	4,357.8	24.8
Telenet	5,768.5	474.0	6,242.5	114.0
Total	\$ 27,648.1	\$ 617.1	\$ 28,265.2	\$ 8,142.4

(i) Except as otherwise indicated, the amounts reported in the table include the named entity and its subsidiaries.

(ii) Debt amounts for UPC Holding and Telenet include notes issued by special purpose entities that are consolidated by the respective subsidiary.

(iii) Debt amounts for UPC Holding include those amounts that were not direct obligations of the entities that were disposed of within the UPC Holding borrowing group.

(iv) The Virgin Media borrowing group includes certain subsidiaries of Virgin Media, but excludes the parent entity, Virgin Media Inc. The cash and cash equivalents amount includes cash and cash equivalents held by the Virgin Media borrowing group, but excludes cash and cash equivalents held by Virgin Media Inc. This amount is included in the amount shown for Liberty Global and unrestricted subsidiaries.



Property and Equipment Additions and Capital Expenditures

The table below highlights the categories of the property and equipment additions of our continuing operations for the indicated periods and reconciles those additions to the capital expenditures of our continuing operations that are presented in the consolidated statements of cash flows in our 10-K.

	Three months ended		Year ended	
	December 31,		December 31,	
	2019	2018	2019	2018
	in millions, except % amounts			
Customer premises equipment	\$ 138.6	\$ 202.1	\$ 657.2	\$ 930.3
New build & upgrade	176.4	166.4	629.9	698.1
Capacity	92.3	128.5	319.9	434.3
Baseline	256.4	291.2	695.5	922.4
Product & enablers	176.7	183.2	578.0	720.5
Total P&E additions	840.4	971.4	2,880.5	3,705.6
Reconciliation of P&E additions to capital expenditures:				
Assets acquired under capital-related vendor financing arrangements ⁽ⁱ⁾	(423.8)	(519.2)	(1,727.0)	(2,175.5)
Assets acquired under capital leases	(19.7)	(34.6)	(66.9)	(102.4)
Changes in current liabilities related to capital expenditures	(53.9)	(103.2)	156.5	25.3
Total capital expenditures, net⁽ⁱⁱ⁾	\$ 343.0	\$ 314.4	\$ 1,243.1	\$ 1,453.0
Capital expenditures, net:				
Third-party payments	\$ 347.9	\$ 340.8	\$ 1,323.9	\$ 1,552.7
Proceeds received for transfers to related parties ⁽ⁱⁱⁱ⁾	(4.9)	(26.4)	(80.8)	(99.7)
Total capital expenditures, net	\$ 343.0	\$ 314.4	\$ 1,243.1	\$ 1,453.0
P&E additions as % of revenue	28.2%	32.9%	25.0%	31.0%

⁽ⁱ⁾ Amounts exclude related VAT of \$72.0 million and \$79.5 million for the three months ended December 31, 2019 and 2018, respectively, and \$286.1 million and \$347.3 million for the year ended December 31, 2019 and 2018, respectively, that were also financed by our vendors under these arrangements.

⁽ⁱⁱ⁾ The capital expenditures that we report in our consolidated statements of cash flows do not include amounts that are financed under vendor financing or finance lease arrangements. Instead, these expenditures are reflected as non-cash additions to our property and equipment when the underlying assets are delivered, and as repayments of debt when the related principal is repaid.

⁽ⁱⁱⁱ⁾ Primarily relates to transfers of centrally-procured property and equipment to our Discontinued Operations and the VodafoneZiggo JV.



ARPU per Cable Customer Relationship

The following table provides ARPU per cable customer relationship for the indicated periods:

	Three months ended December 31,		% Change	Rebased % Change
	2019	2018		
Liberty Global	\$ 60.22	\$ 60.18	0.1%	0.8%
U.K. & Ireland (Virgin Media)	£ 52.44	£ 51.71	1.4%	1.6%
Belgium (Telenet)	€ 58.38	€ 57.11	2.2%	2.2%
UPC	€ 36.90	€ 37.57	(1.8%)	(4.0%)

Mobile ARPU

The following tables provide ARPU per mobile subscriber for the indicated periods:

	ARPU per Mobile Subscriber			
	Three months ended December 31,		% Change	Rebased % Change
	2019	2018		
Liberty Global:				
Including interconnect revenue	\$ 16.15	\$ 18.19	(11.2%)	(2.0%)
Excluding interconnect revenue	\$ 13.98	\$ 14.49	(3.5%)	(2.0%)



Consolidated Operating Data — December 31, 2019

	Homes Passed	Fixed-Line Customer Relationships	Internet Subscribers ⁽ⁱ⁾	Video		Total Video	Telephony Subscribers ⁽ⁱⁱⁱ⁾	Total RGUs	Total Mobile Subscribers ^(vi)
				Basic Video Subscribers ⁽ⁱⁱ⁾	Enhanced Video Subscribers				
Continuing operations:									
U.K.	14,894,400	5,518,100	5,271,000	—	3,687,400	3,687,400	4,605,500	13,563,900	3,179,500
Belgium	3,385,200	2,072,100	1,664,400	164,700	1,701,900	1,866,600	1,212,500	4,743,500	2,808,400
Switzerland ^(v)	2,372,800	1,038,800	661,400	418,700	593,200	1,011,900	506,500	2,179,800	200,700
Ireland	939,900	435,400	378,200	—	280,400	280,400	335,100	993,700	97,600
Poland	3,547,800	1,483,800	1,229,600	196,600	1,067,000	1,263,600	674,400	3,167,600	9,000
Slovakia	619,000	193,000	140,600	28,800	142,500	171,300	87,100	399,000	—
Total continuing operations	25,759,100	10,741,200	9,345,200	808,800	7,472,400	8,281,200	7,421,100	25,047,500	6,295,200

Subscriber Variance Table — December 31, 2019 vs. September 30, 2019

	Homes Passed	Fixed-Line Customer Relationships	Internet Subscribers ⁽ⁱ⁾	Video		Total Video	Telephony Subscribers ⁽ⁱⁱⁱ⁾	Total RGUs	Total Mobile Subscribers ^(vi)
				Basic Video Subscribers ⁽ⁱⁱ⁾	Enhanced Video Subscribers				
Continuing operations:									
U.K.	145,900	(8,100)	1,900	—	(77,600)	(77,600)	(28,100)	(103,800)	42,500
Belgium	9,900	(6,900)	5,200	(11,700)	(3,400)	(15,100)	(8,700)	(18,600)	29,500
Switzerland ^(v)	9,300	(22,700)	(9,800)	(17,000)	(4,800)	(21,800)	(2,700)	(34,300)	11,800
Ireland	(6,500)	(1,300)	(1,000)	—	3,500	3,500	(9,600)	(7,100)	(400)
Poland	23,100	13,200	18,200	12,600	6,200	18,800	(4,600)	32,400	4,100
Slovakia	1,100	300	1,200	300	600	900	1,000	3,100	—
Total continuing operations	182,800	(25,500)	15,700	(15,800)	(75,500)	(91,300)	(52,700)	(128,300)	87,500
Organic Change Summary:									
U.K.	145,900	(8,100)	1,900	—	(77,600)	(77,600)	(28,100)	(103,800)	42,500
Belgium	9,900	(6,900)	5,200	(11,700)	(3,400)	(15,100)	(8,700)	(18,600)	29,500
Other Europe	37,100	(10,500)	8,600	(4,100)	5,500	1,400	(15,900)	(5,900)	15,500
Total Organic Change	192,900	(25,500)	15,700	(15,800)	(75,500)	(91,300)	(52,700)	(128,300)	87,500
Q4 2019 Adjustments:									
Q4 2019 Adjustment - Ireland	(10,100)	—	—	—	—	—	—	—	—
Total adjustments	(10,100)	—	—	—	—	—	—	—	—



Footnotes for Consolidated Operating Data and Subscriber Variance Tables

- (i) In Switzerland, we offer a 2 Mbps internet service to our Basic and Enhanced Video Subscribers without an incremental recurring fee. Our Internet Subscribers in Switzerland include 70,400 subscribers who have requested and received this service
- (ii) We have approximately 27,900 “lifeline” customers that are counted on a per connection basis, representing the least expensive regulated tier of video cable service, with only a few channels.
- (iii) In Switzerland, we offer a basic phone service to our Basic and Enhanced Video Subscribers without an incremental recurring fee. Our Telephony Subscribers in Switzerland include 183,300 subscribers who have requested and received this service.
- (iv) In a number of countries, our mobile subscribers receive mobile services pursuant to prepaid contracts. As of December 31, 2019, our mobile subscriber count included 444,600 and 263,900 prepaid mobile subscribers in Belgium and the U.K., respectively.
- (v) Pursuant to service agreements, Switzerland offers broadband internet, enhanced video and telephony services over networks owned by third-party cable operators (“partner networks”). A partner network RGU is only recognized if there is a direct billing relationship with the customer. At December 31, 2019, Switzerland’s partner networks account for 118,300 Fixed-Line Customer Relationships, 299,300 RGUs, which include 109,400 Internet Subscribers, 104,200 Enhanced Video Subscribers and 85,700 Telephony Subscribers. Subscribers to our enhanced video services provided over partner networks receive basic video services from the partner networks as opposed to our operations. Due to the fact that we do not own these partner networks, we do not report homes passed for Switzerland’s partner networks.

Additional General Notes to Tables:

Most of our broadband communications subsidiaries provide telephony, broadband internet, data, video or other B2B services. Certain of our B2B revenue is derived from SOHO subscribers that pay a premium price to receive enhanced service levels along with video, internet or telephony services that are the same or similar to the mass marketed products offered to our residential subscribers. All mass marketed products provided to SOHOs, whether or not accompanied by enhanced service levels and/or premium prices, are included in the respective RGU and customer counts of our broadband communications operations, with only those services provided at premium prices considered to be “SOHO RGUs” or “SOHO customers.” To the extent our existing customers upgrade from a residential product offering to a SOHO product offering, the number of SOHO RGUs or SOHO customers will increase, but there is no impact to our total RGU or customer counts. With the exception of our B2B SOHO subscribers, we generally do not count customers of B2B services as customers or RGUs for external reporting purposes.

In Belgium, Telenet leases a portion of its network under a long-term finance lease arrangement. These tables include operating statistics for Telenet's owned and leased networks.

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

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



Footnotes

- 1 The indicated growth rates are rebased for acquisitions, dispositions, FX and other items that impact the comparability of our year-over-year results. Please see Rebase Information for information on rebased growth.
- 2 A reconciliation of our 2020 guidance targets for Adjusted FCF to a U.S. GAAP measure is not provided due to the fact that not all elements of the reconciliation are projected as part of our forecasting process, as certain items may vary significantly from one period to another. Absolute full-year 2020 U.S. dollar guidance figures based on FX rates of EUR/USD 1.13 and GBP/USD 1.33.
- 3 Includes subscription and non-subscription revenue. For additional information regarding how we define our revenue categories, see note 20 to the consolidated financial statements included in our 10-K.
- 4 During the fourth quarter of 2019, we changed the presentation of our consolidated reportable segments with respect to certain operating costs related to our centrally-managed technology and innovation function. For additional information and detail of the impact to our consolidated reportable segments, see the Appendix.
- 5 Total B2B includes subscription (SOHO) and non-subscription revenue. B2B and SOHO growth rates include upsell from our residential businesses.
- 6 Liquidity refers to cash and cash equivalents plus the maximum undrawn commitments under subsidiary borrowing facilities, without regard to covenant compliance calculations.
- 7 Our debt and net debt ratios are defined as total debt and net debt, respectively, divided by OCF for the last twelve months (LTM OCF). Prior to December 31, 2019, we presented our debt and net debt ratios under an annualized OCF approach using the OCF from the most recent quarter (LQA OCF). For comparative purposes we have included both the debt and net debt ratios under the LQA method below. Net debt is defined as total debt less cash and cash equivalents. For purposes of these calculations, debt is measured using swapped foreign currency rates, consistent with the covenant calculation requirements of our subsidiary debt agreements, and excludes the loans backed or secured by the shares we hold in ITV plc and Lions Gate Entertainment Corp. For additional information on our investments, see note 7 to the consolidated financial statements included in our 10-K. The following table details the calculation of our debt and net debt to LTM OCF and LQA OCF ratios as of December 31, 2019 (in millions, except ratios):

As of and for the twelve months ended December 31, 2019

Debt to LTM OCF:

Debt and finance lease obligations before deferred financing costs, discounts and premiums	\$	28,265.2
Principal related projected derivative cash payments		(435.3)
ITV Collar Loan		(1,435.5)
Lionsgate Collar Loan		(55.3)
Adjusted debt and finance lease obligations before deferred financing costs, discounts and premiums	\$	26,339.1
LTM OCF	\$	4,859.5
Debt to LTM OCF ratio		5.4

Net Debt to LTM OCF:

Adjusted debt and finance lease obligations before deferred financing costs, discounts and premiums	\$	26,339.1
Cash and cash equivalents		(8,142.4)
Adjusted net debt and finance lease obligations before deferred financing costs, discounts and premiums	\$	18,196.7
LTM OCF	\$	4,859.5
Net debt to LTM OCF ratio		3.7

As of and for the quarter ended December 31, 2019

Debt & Net Debt to LQA OCF:

LQA OCF	\$	5,095.2
Debt to LQA OCF		5.2
Net debt to LQA OCF		3.6

- 8 Our Adjusted FCF is presented on a pro forma basis, consistent with our 2019 guidance, that gives effect to (i) the removal of our estimate of interest and related derivative payments that were made by UPC Holding associated with our discontinued operations in Hungary, Romania and the Czech Republic during the respective period and (ii) the net cash flows that we would have received from transitional services agreements if the sale of the Discontinued Operations had occurred on January 1, 2019.
- 9 For purposes of calculating our average tenor, total third-party debt excludes vendor financing.
- 10 Our aggregate unused borrowing capacity of \$3.0 billion represents the maximum undrawn commitments under the applicable facilities without regard to covenant compliance calculations. Upon completion of the relevant December 31, 2019 compliance reporting requirements for our credit facilities, and assuming no further changes from quarter-end borrowing levels, we anticipate that the full unused borrowing capacity will continue to be available, with the exception of the VM Credit Facilities, which will have borrowing capacity limited to £921.6 million (\$1,222.3 million), and the UPC Holding Bank Facility, which will have borrowing capacity limited to €828.8 million (\$930.6 million), each with no additional restriction to loan or distribute. Our above expectations do not consider any actual or potential changes to our borrowing levels or any amounts loaned or distributed subsequent to December 31, 2019.



Glossary

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

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

The following table provides a reconciliation of our net cash provided by operating activities from continuing operations to Adjusted Free Cash Flow for the indicated periods. In addition, in order to provide information regarding our Adjusted Free Cash Flow that excludes the Discontinued Operations, we also present Adjusted Free Cash Flow on a pro forma basis for the three months and year ended December 31, 2019 as if the sale of the Discontinued Operations had been completed on January 1, 2019.

	Three months ended		Year ended	
	December 31,		December 31,	
	2019	2018	2019	2018
	in millions			
Continuing operations:				
Net cash provided by operating activities	\$ 1,493.9	\$ 1,277.5	\$ 3,714.1	\$ 3,985.0
Cash payments (receipts) for direct acquisition and disposition costs ⁽ⁱ⁾	(37.0)	9.0	(13.5)	23.0
Expenses financed by an intermediary ⁽ⁱⁱ⁾	532.2	459.8	2,171.4	1,883.7
Capital expenditures, net	(343.0)	(314.5)	(1,243.1)	(1,453.0)
Principal payments on amounts financed by vendors and intermediaries	(865.5)	(340.0)	(3,934.7)	(4,258.0)
Principal payments on certain finance leases	(5.9)	(13.9)	(62.9)	(72.9)
Adjusted FCF	<u>\$ 774.7</u>	<u>\$ 1,077.9</u>	<u>631.3</u>	<u>\$ 107.8</u>
Pro forma adjustments related to the sale of the Discontinued Operations:				
Interest and derivative payments ⁽ⁱⁱⁱ⁾			49.6	
Transitional services agreements ^(iv)			89.2	
Pro forma Adjusted FCF ^(v)			<u>\$ 770.1</u>	

- (i) The 2019 amounts include an adjustment to exclude from adjusted free cash flow a \$50.4 million cash receipt associated with a termination fee received from Sunrise Communications Group AG during the fourth quarter in connection with the termination of a share purchase agreement to sell our operations in Switzerland.
- (ii) For purposes of our consolidated statements of cash flows, expenses financed by an intermediary are treated as hypothetical operating cash outflows and hypothetical financing cash inflows when the expenses are incurred. When we pay the financing intermediary, we record financing cash outflows in our consolidated statements of cash flows. For purposes of our Adjusted Free Cash Flow definition, we add back the hypothetical operating cash outflow when these financed expenses are incurred and deduct the financing cash outflows when we pay the financing intermediary.
- (iii) Represents the estimated interest and related derivative payments made by UPC Holding associated with our discontinued UPC Holding operations in Hungary, Romania and the Czech Republic during the applicable period. These estimated payments are calculated based on Hungary, Romania and the Czech Republic's pro rata share of UPC Holding's OCF and UPC Holding's aggregate interest and derivative payments during the applicable period. Although we believe this adjustment to interest and related derivative payments results in a reasonable estimate of the annual ongoing interest and related derivative payments that will occur in relation to the continuing UPC Holding operations, no assurance can be given that the actual interest and derivative payments will be equivalent to the amounts presented. No pro forma adjustments were required with respect to Unitymedia's interest and derivative payments as substantially all of Unitymedia's debt and related derivative instruments were direct obligations of the entities being disposed. As a result, the interest and related derivative payments associated with such debt and derivative instruments of Unitymedia are included in discontinued operations.



- (iv) Represents our preliminary estimate of the net cash flows that we would have received from transitional services agreements if the sale of the Discontinued Operations had occurred on January 1, 2019. The estimated net cash flows are based on the estimated revenue that we expect to recognize from our transitional services agreements during the first 12 months following the completion of the sale of the Discontinued Operations, less the estimated incremental costs that we expect to incur to provide such transitional services. As a result, the pro forma adjustments during the year ended December 31, 2019 include \$88.2 million related to our discontinued operations in Germany, Hungary, Romania and the Czech Republic and \$1.0 million related to our discontinued DTH business.
- (v) Represents the Adjusted FCF that we estimate would have resulted if the sale of the Discontinued Operations had been completed on January 1, 2019. Actual amounts may differ from the amounts assumed for purposes of this pro forma calculation. For example, our Pro forma Adjusted FCF does not include any future benefits related to reductions in our corporate costs as a result of our operating model rationalization or any other potential future operating or capital cost reductions attributable to our continuing or discontinued operations.

ARPU: Average Revenue Per Unit is the average monthly subscription revenue per average cable customer relationship or mobile subscriber, as applicable. Following the adoption of ASU 2014-09, subscription revenue excludes interconnect fees, channel carriage fees, mobile handset sales and late fees, but includes the amortization of installation fees. Prior to the adoption of ASU 2014-09, installation fees were excluded from subscription revenue. ARPU per average cable customer relationship is calculated by dividing the average monthly subscription revenue from residential cable and SOHO services by the average number of fixed-line customer relationships for the period. ARPU per average mobile subscriber is calculated by dividing residential mobile and SOHO revenue for the indicated period by the average number of mobile subscribers for the period. Unless otherwise indicated, ARPU per cable customer relationship or mobile subscriber is not adjusted for currency impacts. ARPU per RGU refers to average monthly revenue per average RGU, which is calculated by dividing the average monthly subscription revenue from residential and SOHO services for the indicated period, by the average number of the applicable RGUs for the period. Unless otherwise noted, ARPU in this release is considered to be ARPU per average cable customer relationship or mobile subscriber, as applicable. Fixed-line customer relationships, mobile subscribers and RGUs of entities acquired during the period are normalized. In addition, for purposes of calculating the percentage change in ARPU on a rebased basis, we adjust the prior-year subscription revenue, fixed-line customer relationships, mobile subscribers and RGUs, as applicable, to reflect acquisitions, dispositions, FX and the January 1, 2018 adoption of the new revenue recognition standard (ASU 2014-09, *Revenue from Contracts with Customers*) on a comparable basis with the current year, consistent with how we calculate our rebased growth for revenue and OCF, as further described in the body of this release.

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

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

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

B2B: Business-to-Business.

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

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

Fixed-Line Customer Relationships: the number of customers who receive at least one of our internet, video or telephony services that we count as RGUs, without regard to which or to how many services they subscribe. Fixed-Line Customer Relationships generally are counted on a unique premises basis. Accordingly, if an individual receives our services in two premises (e.g., a primary home and a vacation home), that individual generally will count as two Fixed-Line Customer Relationships. We exclude mobile-only customers from Fixed-Line Customer Relationships.

Fixed-Mobile Convergence (FMC): Fixed-mobile convergence penetration represents the number of customers who subscribe to both a fixed broadband internet service and postpaid mobile telephony service, divided by the total number of customers who subscribe to our fixed broadband internet service.



Homes Passed: homes, residential multiple dwelling units or commercial units that can be connected to our networks without materially extending the distribution plant. Certain of our Homes Passed counts are based on census data that can change based on either revisions to the data or from new census results.

Internet Subscriber: a home, residential multiple dwelling unit or commercial unit that receives internet services over our networks, or that we service through a partner network.

MDU: Multiple Dwelling Unit.

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

MVNO: Mobile Virtual Network Operator.

NPS: Net Promoter Score.

OCF: As used herein, OCF has the same meaning as the term "Adjusted OIBDA" that is referenced in our 10-K. OCF is the primary measure used by our chief operating decision maker to evaluate segment operating performance. OCF is also a key factor that is used by our internal decision makers to (i) determine how to allocate resources to segments and (ii) evaluate the effectiveness of our management for purposes of annual and other incentive compensation plans. As we use the term, OCF is defined as operating income before depreciation and amortization, share-based compensation, provisions and provision releases related to significant litigation and impairment, restructuring and other operating items. Other operating items include (a) gains and losses on the disposition of long-lived assets, (b) third-party costs directly associated with successful and unsuccessful acquisitions and dispositions, including legal, advisory and due diligence fees, as applicable, and (c) other acquisition-related items, such as gains and losses on the settlement of contingent consideration. Our internal decision makers believe OCF is a meaningful measure because it represents a transparent view of our recurring operating performance that is unaffected by our capital structure and allows management to (1) readily view operating trends, (2) perform analytical comparisons and benchmarking between segments and (3) identify strategies to improve operating performance in the different countries in which we operate. We believe our OCF measure is useful to investors because it is one of the bases for comparing our performance with the performance of other companies in the same or similar industries, although our measure may not be directly comparable to similar measures used by other public companies. OCF should be viewed as a measure of operating performance that is a supplement to, and not a substitute for, operating income, net earnings or loss, cash flow from operating activities and other U.S. GAAP measures of income or cash flows.

A reconciliation of our operating income to total OCF for our continuing operations is presented in the following table:

	Three months ended		Year ended	
	December 31,		December 31,	
	2019	2018	2019	2018
	in millions			
Operating income	\$ 282.5	\$ 252.4	\$ 745.5	\$ 839.1
Share-based compensation expense	77.5	75.0	305.8	206.0
Depreciation and amortization	897.9	924.0	3,652.2	3,858.2
Impairment, restructuring and other operating items, net	15.9	50.2	156.0	248.2
Total OCF	<u>\$ 1,273.8</u>	<u>\$ 1,301.6</u>	<u>\$ 4,859.5</u>	<u>\$ 5,151.5</u>

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

OFCF: As used herein, Operating Free Cash Flow or "OFCF" represents OCF less property and equipment additions. OFCF is an additional metric that we use to measure the performance of our operations after considering the level of property and equipment additions incurred during the period. For limitations of OFCF, see the definition of OCF.

A reconciliation of our total OCF to total OFCF for our continuing operations is presented in the following table:

	Three months ended		Year ended	
	December 31,		December 31,	
	2019	2018	2019	2018
	in millions			
Total OCF	\$ 1,273.8	\$ 1,301.6	\$ 4,859.5	\$ 5,151.5
Property and equipment additions	(840.4)	(971.4)	(2,880.5)	(3,705.6)
Total OFCF	<u>\$ 433.4</u>	<u>\$ 330.2</u>	<u>\$ 1,979.0</u>	<u>\$ 1,445.9</u>

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



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

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

SIM: Subscriber Identification Module.

SOHO: Small or Home Office Subscribers.

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

U.S. GAAP: Accounting principles generally accepted in the United States.

YoY: Year-over-year.



Appendix - Supplemental OCF, P&E and OFCF information

The following table presents (i) OCF, (ii) property and equipment additions, (iii) OFCF and (iv) percentage change from period to period for OCF and OFCF on a rebased basis for each of our consolidated reportable segments:

	Year ended December 31,			Increase/(decrease)	
	2019	2018	2017	Rebased %	
in millions, except % amounts					
OCF⁽ⁱ⁾:					
U.K./Ireland	\$ 2,800.5	\$ 2,995.5	\$ 2,831.2	(2.3)	3.3
Belgium	1,386.1	1,480.0	1,300.3	(2.0)	7.9
Switzerland	627.9	712.0	800.3	(10.3)	(11.3)
Continuing CEE	215.0	233.6	220.1	(2.3)	1.4
Central and Corporate	(171.1)	(257.8)	(317.3)	3.5	19.0
Intersegment eliminations	1.1	(11.8)	(9.5)	N.M.	N.M.
Total OCF	<u>\$ 4,859.5</u>	<u>\$ 5,151.5</u>	<u>\$ 4,825.1</u>	<u>(3.1)</u>	<u>3.5</u>
Property and equipment additions⁽ⁱⁱ⁾:					
U.K./Ireland	\$ 1,578.0	\$ 1,988.9	\$ 2,161.8		
Belgium	537.2	790.8	691.0		
Switzerland	277.9	249.6	244.4		
Continuing CEE	107.0	152.8	158.2		
Central and Corporate	380.4	523.5	448.1		
Total property and equipment additions	<u>\$ 2,880.5</u>	<u>\$ 3,705.6</u>	<u>\$ 3,703.5</u>		
OCF⁽ⁱ⁾ ⁽ⁱⁱⁱ⁾:					
U.K./Ireland	\$ 1,222.5	\$ 1,006.6	\$ 669.4	26.4	50.4
Belgium	848.9	689.2	609.3	27.8	5.7
Switzerland	350.0	462.4	555.9	(22.8)	(17.0)
Continuing CEE	108.0	80.8	61.9	42.7	22.0
Central and Corporate	(551.5)	(781.3)	(765.4)	18.1	(0.1)
Intersegment eliminations	1.1	(11.8)	(9.5)	N.M.	N.M.
Total OFCF	<u>\$ 1,979.0</u>	<u>\$ 1,445.9</u>	<u>\$ 1,121.6</u>	<u>34.5</u>	<u>24.2</u>

(i) Includes the Centrally-held Operating Cost Allocations, as defined and described below.

(ii) Excludes the Centrally-held P&E Attributions, as defined and described below.



Centrally-held Operating Cost Allocations

During the fourth quarter of 2019, we changed the presentation of certain operating costs related to our centrally-managed technology and innovation function. These costs, which were previously included in Central and Corporate, are now allocated to our consolidated reportable segments. This change, which we refer to as the "Centrally-held Operating Cost Allocations", was made as a result of internal changes with respect to the way in which our chief operating decision maker evaluates the OCF of our operating segments. Segment information for all periods presented has been revised in our reported U.S. GAAP disclosures to reflect this change. The following table provides a summary of the impact on the OCF of our consolidated reportable segments and Central and Corporate that resulted from the Centrally-held Operating Cost Allocations.

	Year ended December 31,		
	2019	2018	2017
	in millions		
Increase (decrease) to OCF:			
U.K./Ireland	\$ (66.6)	\$ (61.7)	\$ (52.8)
Switzerland	(33.0)	(36.7)	(32.3)
Continuing CEE	(14.7)	(15.5)	(13.4)
Central and Corporate	114.3	113.9	98.5
Total Liberty Global	\$ —	\$ —	\$ —

Centrally-held Property & Equipment Attributions

Property and equipment additions presented for Central and Corporate include certain capital costs incurred for the benefit of our operating segments. Generally, for purposes of the consolidated financial statements of our borrowing groups, the expense associated with these capital costs is allocated and/or charged to our operating segments as related-party fees and allocations in their respective statements of operations over the period in which the operating segment benefits from the use of the Central and Corporate asset. Related-party fees and allocations are excluded from the reported OCF metric of these borrowing groups. These amounts are based on (i) our estimate of its share of underlying costs, (ii) our estimate of its share of the underlying costs plus a mark-up or (iii) commercially-negotiated rates. These charges and allocations differ from the attributed OFCF approach, as further described below.

For internal management reporting and capital allocation purposes, we evaluate the OFCF of our operating segments on an "attributed" basis, whereby we estimate and attribute certain capital costs incurred by Central and Corporate to our operating segments as if that operating segment directly incurred its estimated share of the capital costs in the same period the costs were incurred by Central and Corporate. These capital costs represent assets that are jointly used by our operating segments. In the context of evaluating our operating segments, we believe this non-GAAP approach, which we refer to as the "Centrally-held Property and Equipment Attributions", is a meaningful measure as it represents a transparent view of what the estimated capital spend for our operating segments might be if they were to operate as a stand-alone business (excluding, among other considerations, any impact from lost economies of scale) and allows us to more accurately (i) review capital trends by operating segment, (ii) perform benchmarking between operating segments and (iii) drive alignment and accountability between Central and Corporate and our operating segments with respect to our consolidated capital spend. The amounts attributed to each operating segment are estimated based on (a) actual costs incurred by Central and Corporate, without any mark-up, and (b) each respective operating segment's estimated use of the associated assets.

The below table summarizes the Centrally-held Property and Equipment Attributions, consistent with our internal management reporting approach. This presentation is for illustrative purposes only and is intended as a supplement to, and not a substitute for, our U.S. GAAP presentation of the property and equipment additions of our reportable segments.

	Year ended December 31,		
	2019	2018	2017
	in millions		
Increase (decrease) to property and equipment additions:			
U.K./Ireland	\$ 136.5	\$ 176.6	\$ 151.3
Belgium	11.3	—	—
Switzerland	52.1	56.1	49.3
Continuing CEE	26.9	37.8	31.3
Central and Corporate	(226.8)	(270.5)	(231.9)
Total Liberty Global	\$ —	\$ —	\$ —