LIBERTY GLOBAL PLC INVESTOR CALL | Q2 2019

August 8, 2019

"SAFE HARBOR"

Forward-Looking Statements + Disclaimer

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements with respect to our strategies, future growth prospects and opportunities; expectations with respect to our rebased OCF growth, our Adjusted FCF and our P&E additions; expectations with respect to the intended tender offers, including the aggregate amount of Class A and Class C ordinary shares that we expect to offer to purchase in the tender offer, the expected price ranges, and whether we actually commence and consummate the tender offer as planned or at all; the anticipated regulatory approval and closing of the Sunrise transaction; the expected use of proceeds of the Vodafone transaction, debt repayment and mergers and acquisitions opportunities; decisions regarding our capital allocation; expectations with respect to the development, launch and benefits of our innovative and advanced products and services, including Oomph! and the rollout of 1 Gbps speeds; 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; 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/A and Forms 10-Q. These forward-looking statements speak only as of the date of this presentation. 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.

Specifically with respect to the projections relating to UPC Switzerland, we note that these were prepared based solely on information available at the time of preparation and are not a guarantee of actual future results, and the information contained in such projections should not be relied upon as such. Financial projections involve risks, uncertainties and assumptions. The future financial results of UPC Switzerland may materially differ from those expressed in these projections due to factors that are beyond Liberty Global's ability to control or predict. Among other things, Liberty Global will have no control over the operation of UPC Switzerland following the consummation of its pending sale to Sunrise.

Additional Information and Where to Find It

This presentation is for informational purposes only, is not a recommendation to buy or sell the Company's ordinary shares, and does not constitute an offer to buy or the solicitation to sell the Company's ordinary shares. The tender offers described in this presentation have not yet commenced, and there can be no assurances that the Company will commence the tender offers on the terms described in this presentation or at all. The tender offers will be made only pursuant to the Offer to Purchase, the Letters of Transmittal and other related materials that the Company expects to file with the SEC upon commencement of the tender offers. SHAREHOLDERS ARE URGED TO CAREFULLY READ THE OFFER TO PURCHASE, LETTERS OF TRANSMITTAL AND RELATED MATERIALS (AND ANY AMENDMENT OR SUPPLEMENT THERETO) IF AND WHEN THEY BECOME AVAILABLE BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION, INCLUDING THE VARIOUS TERMS OF, AND CONDITIONS TO, THE TENDER OFFERS, THAT SHAREHOLDERS SHOULD CONSIDER BEFORE MAKING ANY DECISION REGARDING TENDERING THEIR SHARES. If and when the tender offers are commenced, shareholders will be able to obtain a free copy of the tender offer materials (including the Offer to Purchase, the Letters of Transmittal and other related materials) that the Company will be filing with the SEC at the SEC's website at www.sec.gov. In addition, if and when the tender offers are commenced, the Company will provide contact information for shareholders if they should have any questions or assistance.

Presentation of Continuing & Discontinuing Operations:

On July 31, 2018, we sold our operations in Austria. On May 2, 2019, we sold our UPC DTH operations, which provide direct-to-home satellite services in Hungary, the Czech Republic, Romania and Slovakia. On July 31, 2019, we sold our operations in Germany, Hungary, Romania and the Czech Republic. Our operations in Germany, Hungary, Romania and the Czech Republic, along with our former UPC DTH operations and operations in Austria are collectively referred to herein as the "Discontinued Operations" and have all been accounted for as discontinued operations in our June 30, 2019 Form 10-Q.

The term "Excluding Switzerland" represents our continuing operations excluding UPC Switzerland and certain holding companies within the UPC Holding borrowing group (together, the "Switzerland Disposal Group"), including the UPC Holding borrowing group's existing senior and senior secured notes (the "UPC Notes") associated derivatives and certain other debt items. This is the basis on which analyst consensus estimates for our key performance indicators are currently derived and on which we originally provided our 2019 guidance for OCF, Adjusted FCF and Property and Equipment Additions. We present OCF, OFCF, Adjusted FCF and Property and Equipment Additions on an Excluding Switzerland basis in order to allow readers to track our performance against analyst consensus estimates and our original 2019 guidance as applicable.

Additional Information Relating to Defined Terms:

Please refer to the Appendix at the end of this presentation, as well as our press release dated Aug 7, 2019 and our SEC filings, for the definitions of the following terms which may be used herein, including: Rebased Growth, Operating Cash Flow ("OCF"), Adjusted Free Cash Flow ("FCF"), Operating Free Cash Flow ("OFCF"), Revenue Generating Units ("RGUs"), Average Revenue per Unit ("ARPU"), as well as non-GAAP reconciliations, where applicable.

DELIVERING 2019 PRIORITIES

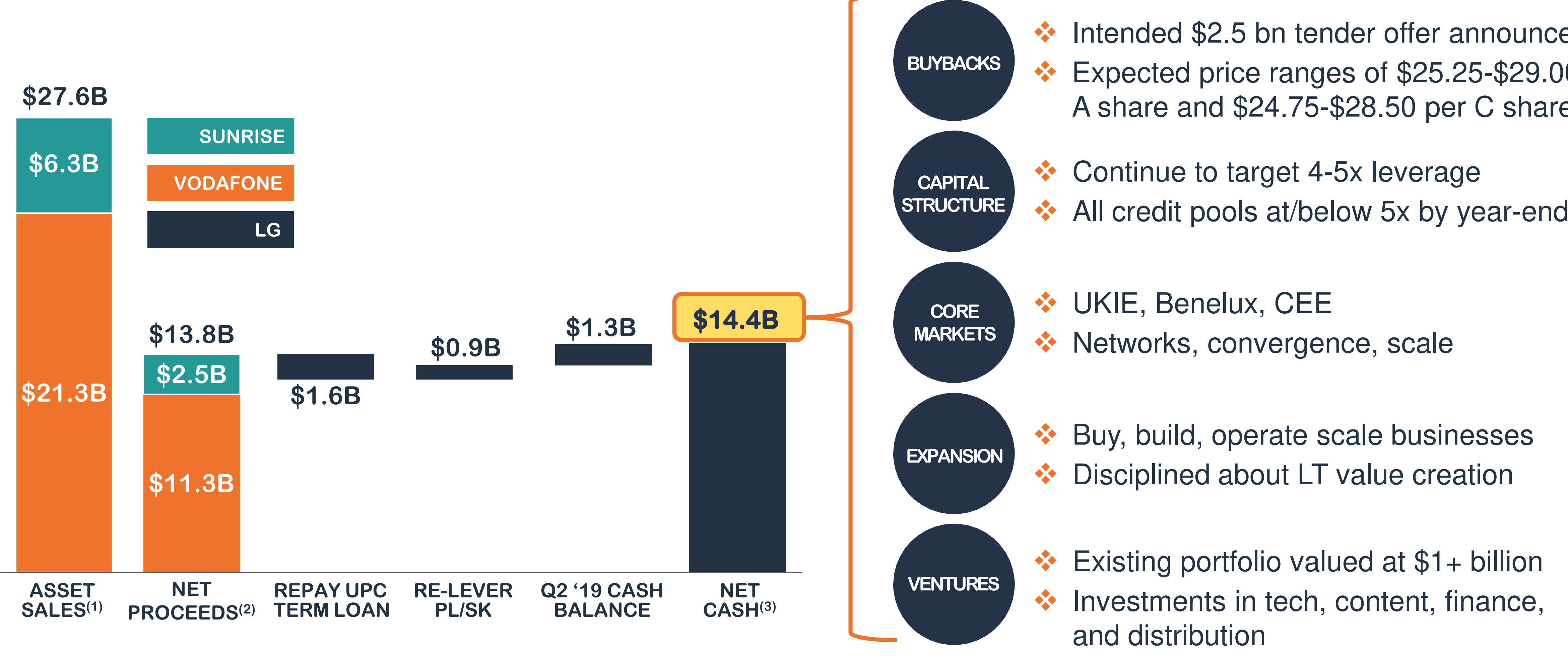
1. **Complete announced M&A transactions**
   - Vodafone deal closed July 31
   - Sale of UPC Switzerland on track for Q4'19
   - Total expected PF cash balance of $14.4 billion
2. **Reset operating model and cost structure**
   - Corporate costs on track for 20% reduction by 2020
   - T&I restructured to reflect smaller base & TSA revenues
   - Confirming 2019 OCF guidance
3. **Drive OFCF with 20% reduction in P&E**
   - YTD P&E additions down 25% vs. prior year
   - OFCF growth of 74% YoY through first 6 months
   - On track to hit 2019 free cash flow guidance
4. **Develop value creation plans for capital allocation**
   - Intended $2.5 bn Dutch auction tender offer announced
   - LT investment principles in place

GUIDANCE BASIS Continuing Operations excluding Switzerland	Q2'19	H1'19
Revenue Growth (rebased)	(0.6%)	(0.4%)
OCF Growth (rebased)	(3.4%)	(1.3%)
OFCF Growth	34%	74%
Adjusted FCF[1]	$546	$(80m)

REPORTED BASIS Continuing Operations including Switzerland	Q2'19	H1'19
Revenue Growth (rebased)	(0.9%)	(0.7%)
OCF Growth (rebased)	(4.3%)	(2.4%)
OFCF Growth	14%	37%
Adjusted FCF	$552m	$(73m)

(1) Pro forma Adjusted FCF incorporates our preliminary estimate of (i) assumed interest and related derivative payments that were made by the UPC Holding continuing operations during the period and (ii) the net cash flows that we would have received from transitional services agreements if the sale of the remaining Discontinued Operations and UPC Switzerland had occurred on January 1, 2019. A reconciliation of our Adjusted FCF guidance for 2019 to a U.S. GAAP measure is not provided as 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.

CAPITAL ALLOCATION APPROACH



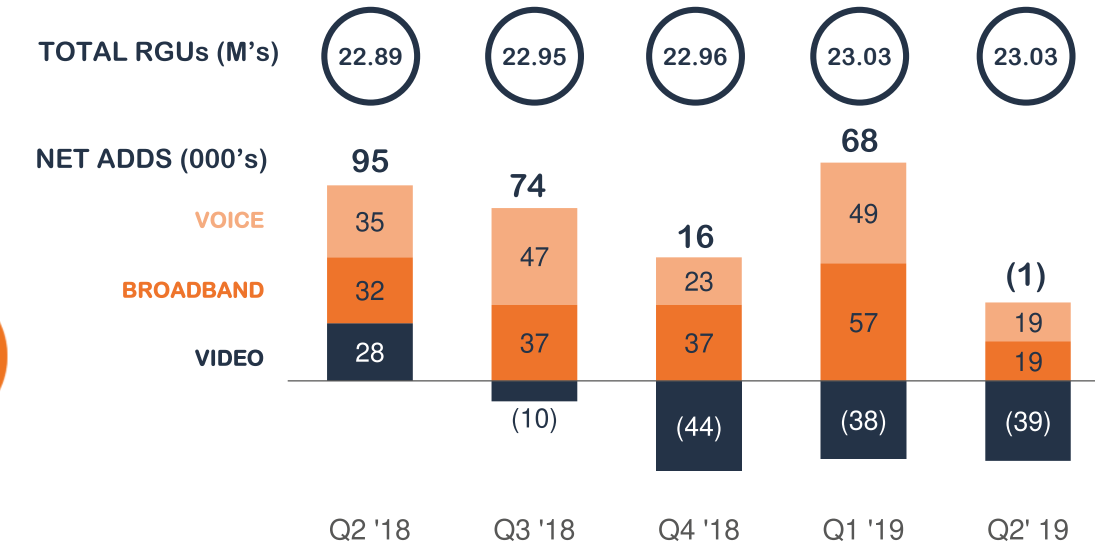
(1) Represents the total Enterprise Value for Vodafone transaction of 11.5x 2017 Adjusted Segment OCF; Total Enterprise Value for Sunrise transaction of 10x estimated 2019 Adjusted Segment OCF; Convenience translation based on USD/EUR rate of 1.12 and USD/CHF rate of 1.00.

(2) The amount of net cash proceeds we received from the Vodafone transaction differs from the amount we estimated at the time the deal was announced in May 2018 primarily due to the net effect of (i) adverse movement in the EUR/USD exchange rate, (ii) higher vendor financing at Unitymedia in the interim period between transaction announcement and closing, which had the effect of Liberty Global receiving a corresponding increase in cash generated by Unitymedia during the period prior to closing, (iii) a debt recapitalization at Unitymedia, (iv) the settlement of centrally-procured vendor financing amounts that are attributable to the disposed operations, (v) changes in the value of our derivatives associated with the debt at Unitymedia and (vi) working capital and cash adjustments. The net cash proceeds from the Sunrise transaction differs from the amount we estimated at the time the deal due to FX movements

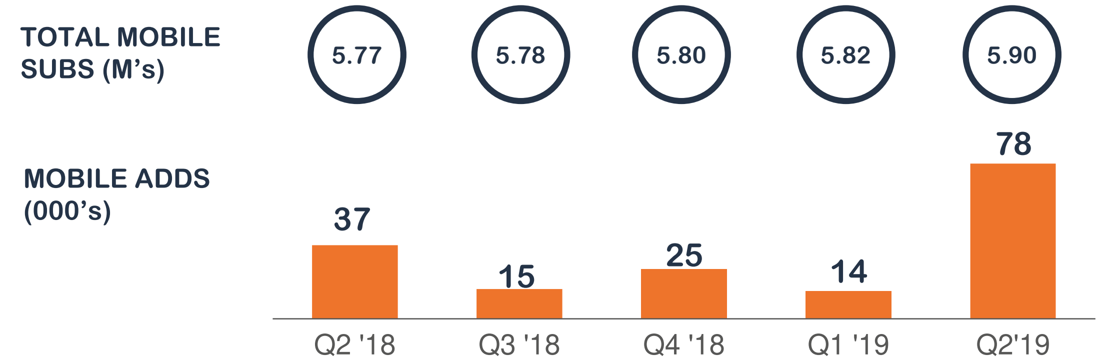
(3) Excludes Revolving Credit Facilities of $2.6bn (Virgin, Telenet & UPC)

FIXED & MOBILE SUBSCRIBERS

FIXED SUBSCRIBERS (Excluding Switzerland)



MOBILE SUBSCRIBERS (Excluding Switzerland)



MARKET PERFORMANCE

- **Virgin Media** broadband and video net adds slow in Q2 amid competitive market dynamics, yet market share stable with U.K. churn flat on prior year
- **Telenet** performance improved in Q2 following revamped offers and the completion of SFR customer migrations in Brussels

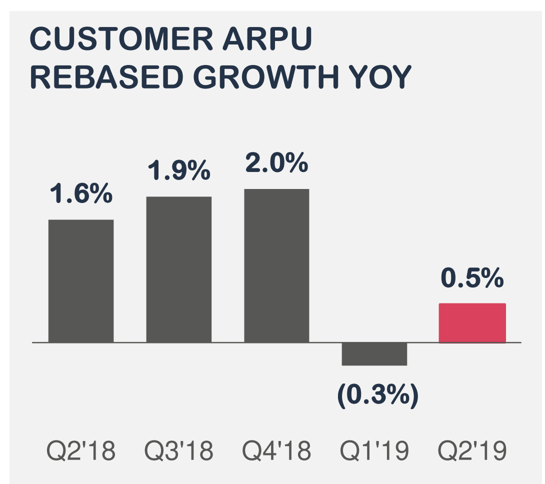
PRODUCT PERFORMANCE

- **Broadband** remains growth engine with ~150k subs LTM and an increasing demand for faster speeds met with 500Mbps offers in U.K. and the roll-out of 1-Gig cities
- **Video** focus away from entry-level TV and towards more capital efficiency drives RGU loss in the U.K. In Belgium, Horizon 4 platform launched with positive initial results
- **Mobile** net adds growth from new Oomph bundles at Virgin Media and Telenet's expanded WIGO portfolio that caters more effectively to all types of families

VIRGIN MEDIA RETURNS TO ARPU GROWTH

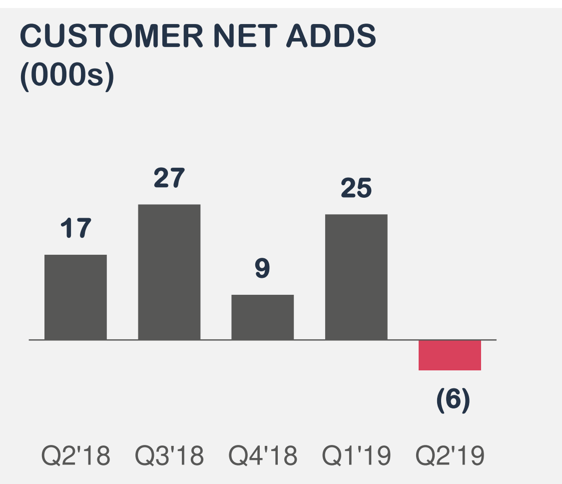
Softer volumes due to market dynamics but underlying demand for high speed broadband remains

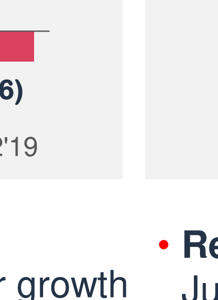
PRICE



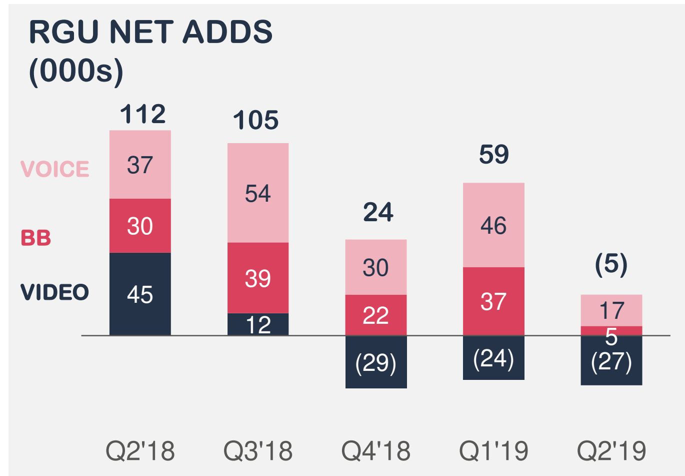
- **Subscription ARPU** continues to be impacted by lower PPV and phone usage; however, underlying rental up 1.2%
- **Average price rise** of 4.9%, effective Sep/Oct, should support H2 ARPU growth

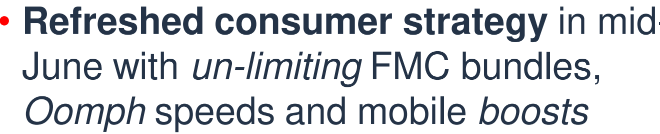
VOLUME





- **Disciplined customer acquisition** despite lower growth across the U.K.
- **Focus on higher value bundles** drove growth in broadband/voice, video attrition at low end offers
- **Ultrafast speed leader** with ~80% of our broadband base taking 100+ Mbps



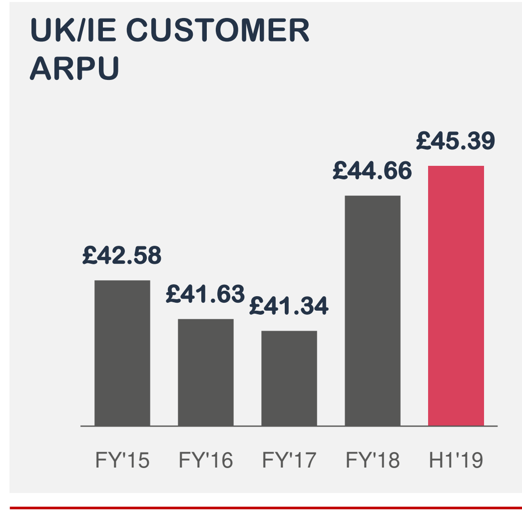


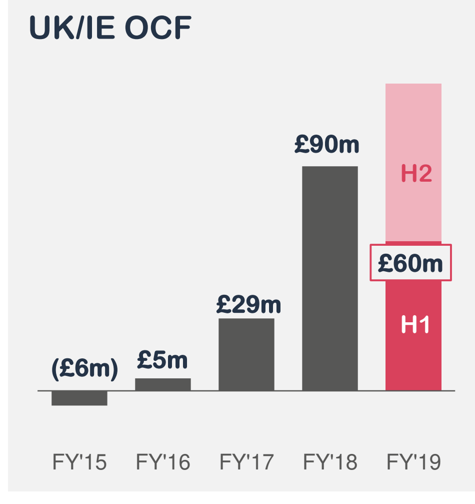
- **Refreshed consumer strategy** in mid-June with *un-limiting* FMC bundles, *Oomph* speeds and mobile *boosts*
- **New Sky deal** adds linear content in UHD and additional on-demand content
- **Amazon Prime** video launched in July
- **Rolling out 1 Gbps** across U.K. by end of 2021, with at least 2 cities in H2 2019

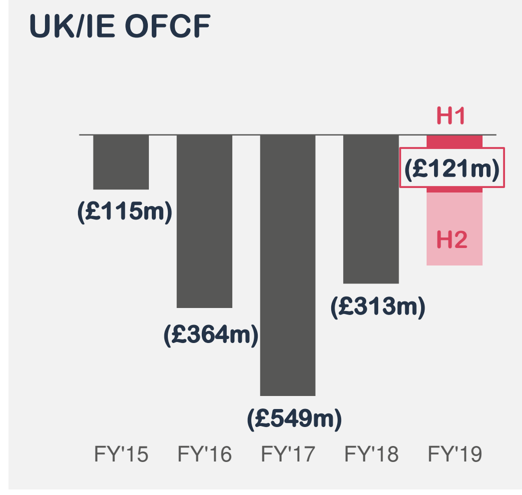
(1) Defined as mobile subscribers as a percentage of fixed broadband subscribers

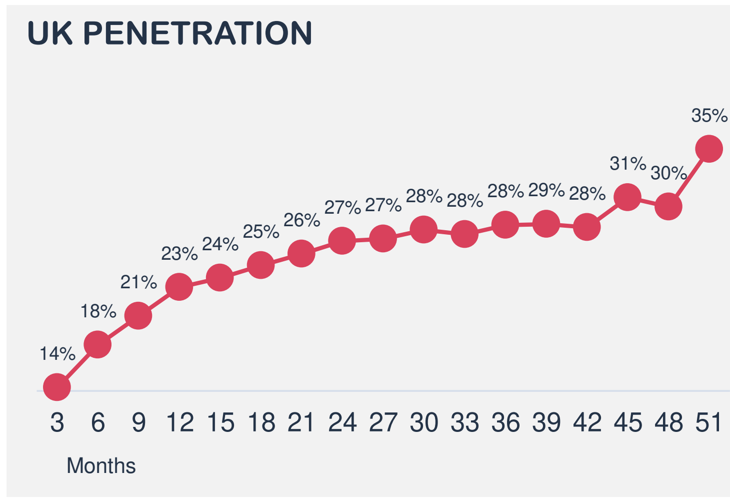
PROJECT LIGHTNING LEADS THE MARKET

Compelling returns, consistent build rate and improving efficiency









HIGHLIGHTS

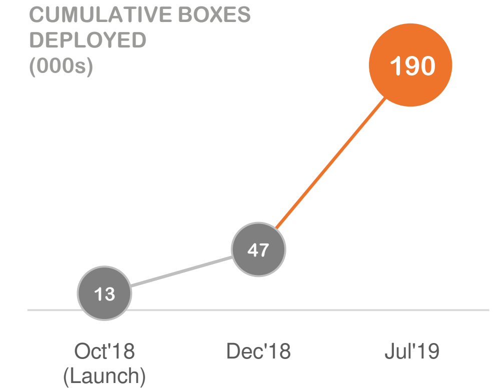
- 1.8 millions homes built to date; 232k in H1 2019
- U.K. CPP trending down, £610 in Q2[(1)]
- ARPU in-line with rest of business (post discounts)
- Evaluating strategic options for financing & expansion

(1) Cumulative cost per premise since project inception is £683

(2) Project Lightning represents incremental impacts to our core Virgin Media business. Please see the appendix for additional information

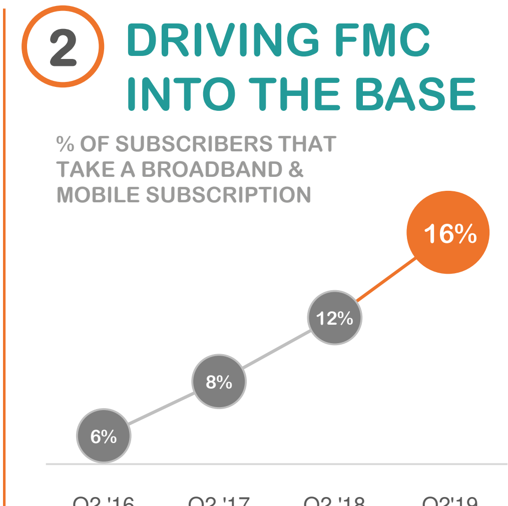
SWISS GROWTH DRIVERS WORKING

1 TRANSFORMING TV PROPOSITION



- Aggressively rolling out UPC TV, on track for >50% of video base by YE
- NPS significantly higher than legacy TV platform

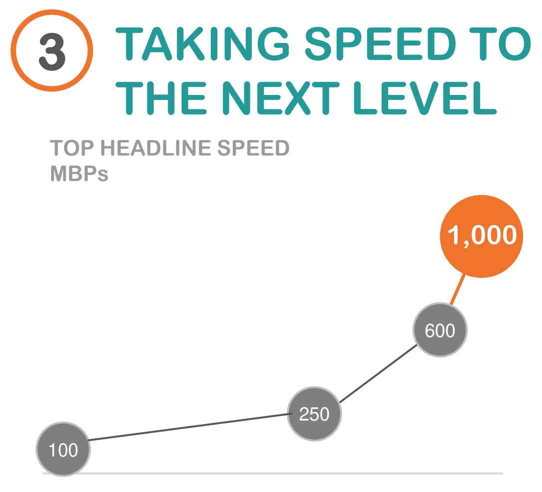
2 DRIVING FMC INTO THE BASE



- Record monthly sales in May, in total and for cross-sells
- Added 14k mobile subs in Q2, mobile base now at ~170k

DRIVING UNDERLYING CHURN BENEFITS

3 TAKING SPEED TO THE NEXT LEVEL



- Launch of 1Gbps internet product planned for Q4 2019
- Gig speeds available footprint wide upon launch
- UPC customers already average >250Mbps

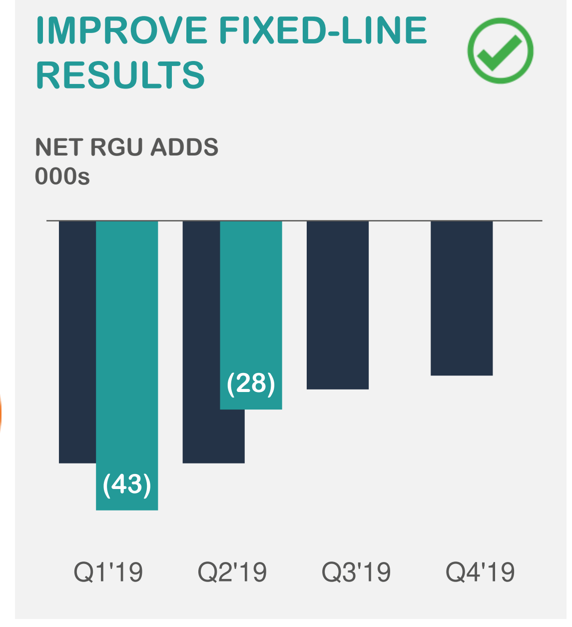
STRENGTHENING SPEED LEADERSHIP POSITION

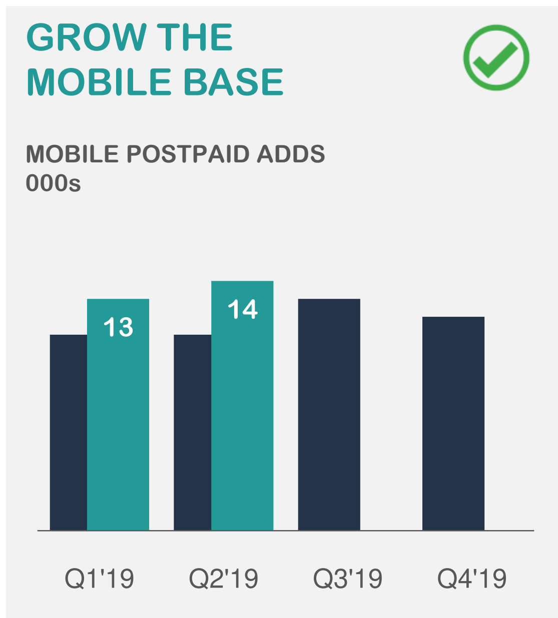
4 INVESTING IN DIGITIZATION

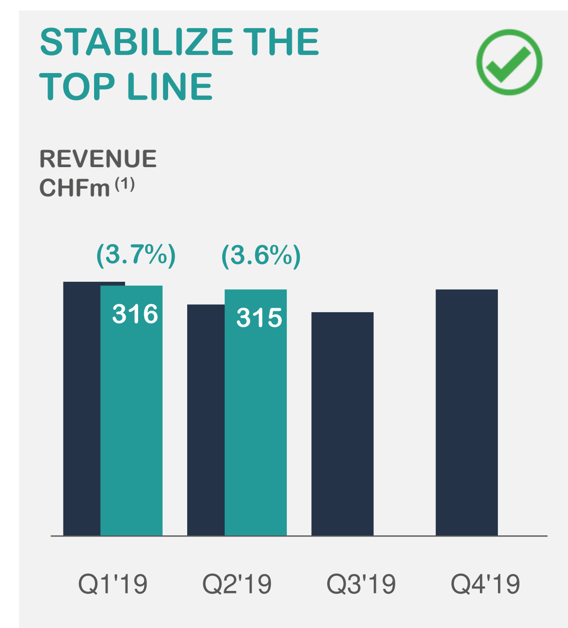
- Multi-year initiative underway to structurally improve customer journeys and sales/service channels
- Transforming operating model, way of working and IT architecture
- Increased efficiency & improved customer experience to yield cost, upsell and churn benefits
- H1'19 invested CHF4m opex & CHF8m capex respectively, similar level of investment planned for H2'19

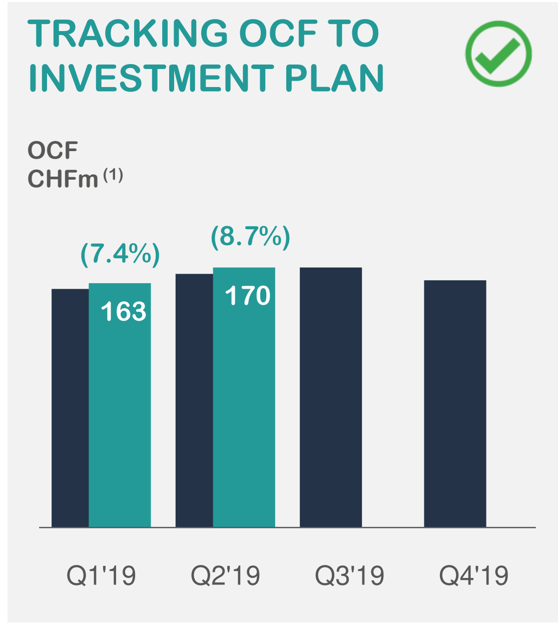
EARLY EVIDENCE OF BENEFITS IN 2019

SWISS RESULTS RIGHT ON PLAN









H1 ACTUAL

- Turnaround plan fully on track, meeting revenue, OCF and Net Adds targets
- Revenue losses moderating, with ARPU growing and improving video & mobile volumes
- OCF reflects Year 1 investments in UPC TV, 1Gbps and digitization efforts
- Expect to be fully in line with plan targets for FY 2019

(1) Content costs and partner wholesale revenues from our MySports channel are higher in Q1 and Q4, due to the relative weighting of Winter sports such as Ice Hockey.

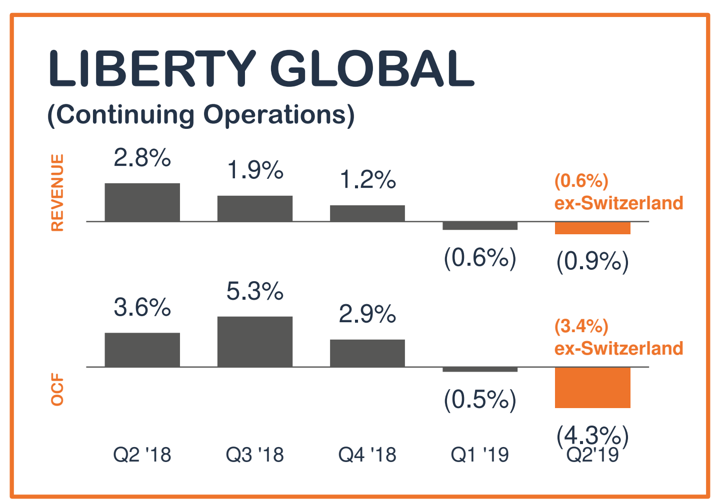
EXECUTIVE SUMMARY

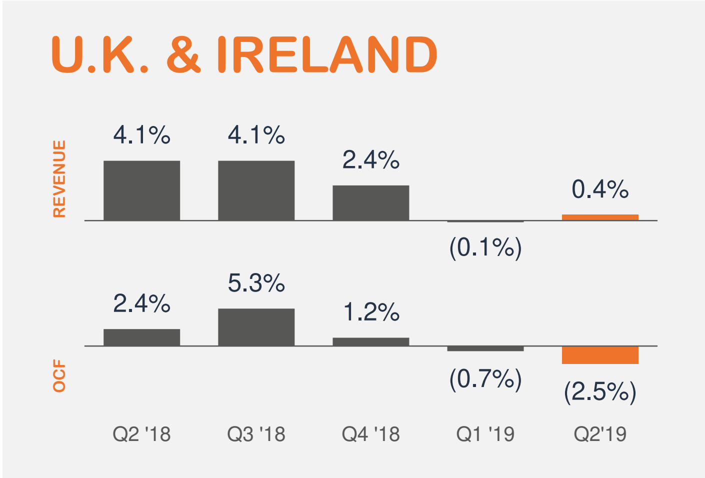
FINANCIAL RESULTS

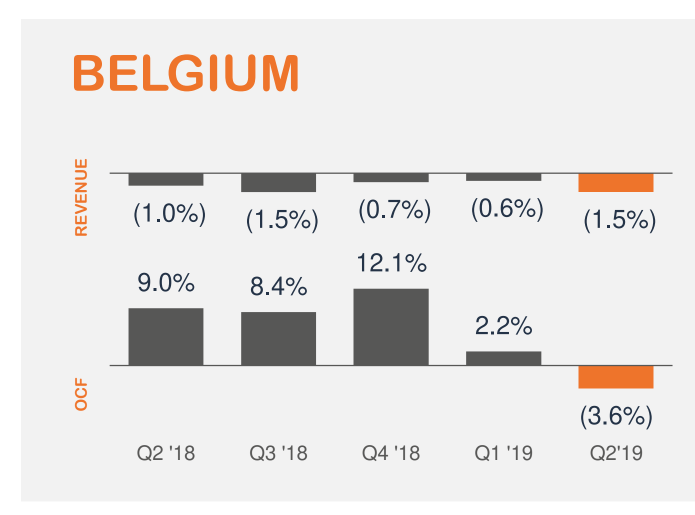
APPENDIX

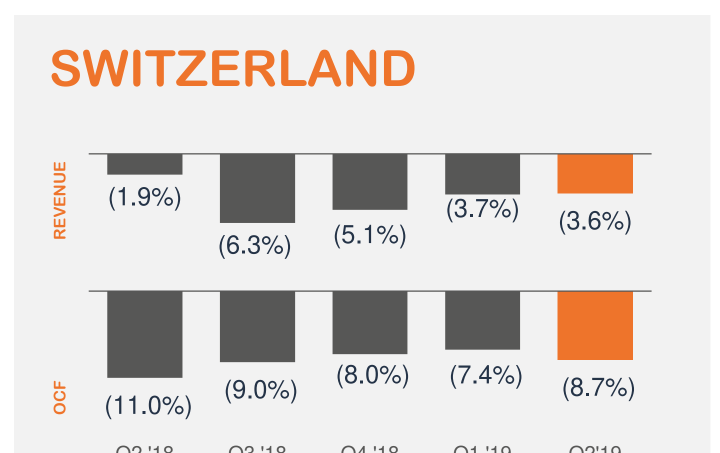
REVENUE & OCF GROWTH: CONTINUING OPERATIONS[1]

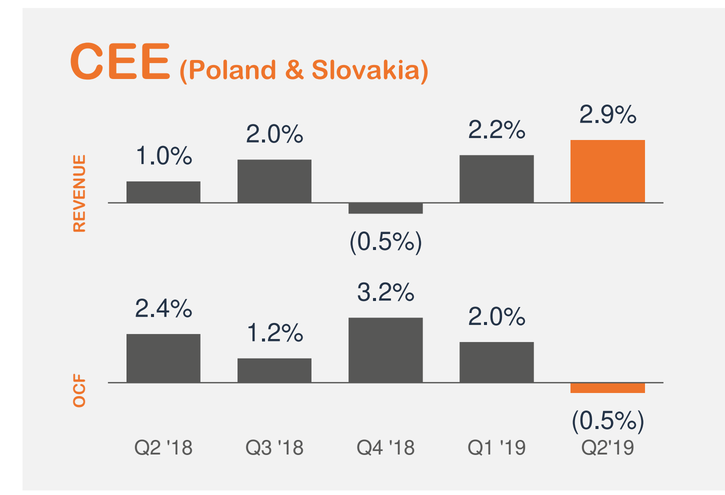
Softer Q2 OCF performance as known headwinds in UK and Belgium emerge

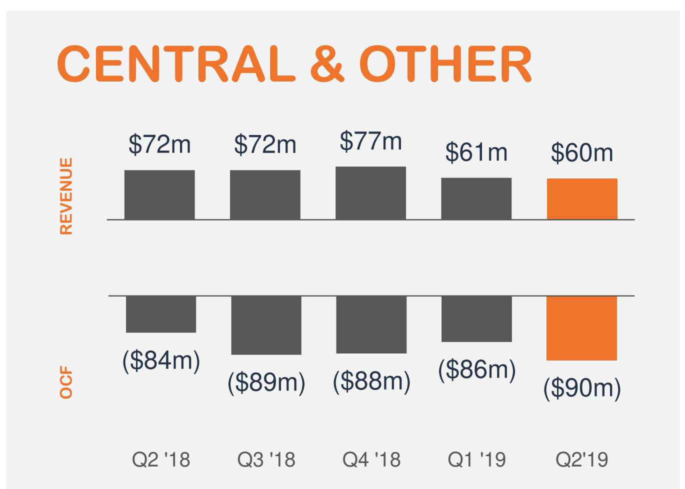












(1) Revenue & OCF growth rates presented on a rebased basis

DESCALING CENTRAL

Two distinct areas; cost reductions progressing in line with plan

	2018 Baseline	Target	Status

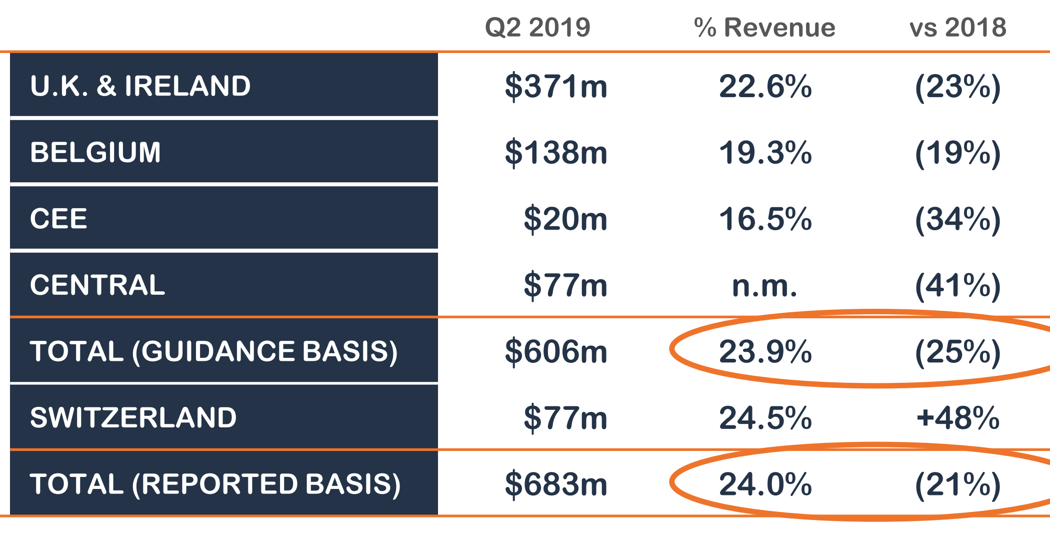
1 CORPORATE
Typical head office functions:
• Finance
• Legal
• Human Resources
	~$260m
	opex
		~20% reduction by 2020	• On track to achieve targeted reductions
			• Key workstreams include:
			  • Reducing layers
			  • Rationalizing functions
			  • Increasing local responsibility

2 TECHNOLOGY & INNOVATION
Service delivery group, undertaking activities on behalf of Continuing Operations & TSAs:
• Product development
• Technology strategy
• Shared platforms
	~$800m
	opex & capex (1)
		Drive further efficiency on retained spend	• TSA Service agreements in place with partners
			  • ~$400m TSA Revenue for 2020 (2)
			  • Declining over next 4-5 years
			• Optimization of corresponding spend well underway
			• Majority of costs are third party, easier to flex
			• Developing multi-year roadmap for Continuing Operations

(1) Excludes ~$100 million of costs of sales for handsets sold to third parties and CPE sold to Dutch JV, which represents low margin revenue streams and are not material on an OCF level.
(2) Based on minimum service agreements with Vodafone (~$165m), Sunrise (~$90m), Deutsche Telekom (~$35m) and TSA Revenue from VodafoneZiggo of ~$100m.

Q2 P&E ADDITIONS

Significant YoY capex reductions across all Continuing Operations



		P&E Additions		
		Q2 2019	% Revenue	vs 2018
BY SEGMENT (% local revenue)	U.K. & IRELAND	$371m	22.6%	(23%)
	BELGIUM	$138m	19.3%	(19%)
	CEE	$20m	16.5%	(34%)
	CENTRAL	$77m	n.m.	(41%)
	TOTAL (GUIDANCE BASIS)	$606m	23.9%	(25%)
	SWITZERLAND	$77m	24.5%	+48%
	TOTAL (REPORTED BASIS)	$683m	24.0%	(21%)
BY DRIVER (% total revenue)	CPE	$158m	5.5%	(34%)
	NEW BUILD & UPGRADE[1]	$162m	5.7%	(15%)
	CAPACITY	$77m	2.7%	(9%)
	PRODUCT & ENABLERS	$131m	4.6%	(17%)
	BASELINE	$155m	5.4%	(19%)
	TOTAL (REPORTED BASIS)	$683m	24.0%	(21%)

- Targeting ~20% reduction in capital intensity for full-year 2019
- YoY reduction in U.K. due to V6 phasing and lower Lightning cost per premise
- Belgium lower YoY due to completion of fixed and mobile network upgrades
- Continued roll out of UPC TV and 1 Gig upgrade and digitization investments in Switzerland

(1) New Build & Upgrade driver category also includes B2B capex.

H1'19 FINANCIAL OVERVIEW

$1 billion of OFCF in H1, growing at almost 40% YoY including Switzerland (74% ex-Switzerland)

As of and for six months ended June 30, 2019 (in millions)	U.K. & IRELAND			BELGIUM	POLAND AND SLOVAKIA	SWITZERLAND	LG Continuing Operations [4]	50-50 DUTCH JV [5]
	PROJECT LIGHTNING [1]	REST OF BUSINESS [2]	TOTAL					
REVENUE	$140	$3,165	$3,305	$1,425	$238	$631	$5,718	$2,178
OCF	$78	$1,334	$1,412	$688	$115	$333	$2,374	$1,044[6]
% Revenue	56%	42%	43%	48%	48%	53%	42%	48%
P&E ADDITIONS	($235)	($532)	($767)	($279)	($41)	($136)	($1,381)	($427)
% Revenue	n.m.	17%	23%	20%	17%	22%	24%	20%
OFCF PRE CENTRAL COST ALLOCATION	($157)	$802	$645	$409	$74	$197	$993	$617
% Revenue	n.m.	25%	20%	29%	31%	31%	17%	28%
PRO FORMA TSA REVENUE[7]	-	-	-	-	-	-	$77	-
CENTRAL COST CHARGES[3]	-	($88)	($88)	-	($18)	($44)	-	($63)
PRO FORMA OFCF	($157)	$714	$557	$409	$56	$153	$1,070	$554
% Revenue	n.m.	23%	17%	29%	24%	24%	19%	25%

(1) Revenue, OCF and OFCF represent incremental impacts of Project Lightning and exclude allocations of certain costs including, broadband network taxes, general corporate costs and administrative, general network operations, information technology, facilities, commercial and general sales and marketing costs. Please see the appendix for additional information
(2) Rest of business includes B2B and mobile, among other businesses
(3) For Virgin Media and Central and Eastern Europe, the amounts represent allocated costs (operating and capital) incurred by our Central and Corporate segment on behalf of these operating segments, assuming Virgin Media and Central and Eastern Europe directly incurred and paid these costs in the period. For Switzerland and the Dutch JV, the amounts represent charges based on the transition services agreement (TSA) we agreed with Sunrise and Vodafone. These approaches differ from the charges and allocation methodologies we use for our related-party transactions as recorded in the statements of operations shown by our operating segments, principally in that the statements of operations reflect costs allocated and charged over the period in which the operating subsidiary benefits from the expense or the use of our centrally owned capital. The related-party charges and allocations in the operating segments' statements of operations may be based on (i) our estimated share of the underlying costs, (ii) our estimated share of the underlying costs plus a mark-up or (iii) commercially-negotiated rates and differs from the presentation in the table above as this presentation is based on actual costs or agreed TSAs and assumes cash payment in the period the charges and allocations are incurred
(4) LG continuing operations include Central and Corporate and Intersegment Eliminations
(5) Represents 100% of the non-consolidated Dutch JV
(6) OCF for the Dutch JV as shown in the table above differs from the reported OCF due to the separate presentation of the $(63) million of central costs charged by Liberty Global
(7) Represents our preliminary estimate of revenue we would have received from transitional services agreements if the sale of the remaining Discontinued Operations had occurred on January 1, 2019. The estimates include incremental costs that we expect to incur to provide such transitional services. As a result, the pro forma adjustments during the six months ended June 30, 2019 include $76.0 million related to our discontinued operations in Germany, Hungary, Romania and the Czech Republic, respectively, and $1.0 million related to our discontinued DTH business

PRO FORMA ADJUSTED FCF [1]

Guidance Basis (Continuing Operations excluding Switzerland)

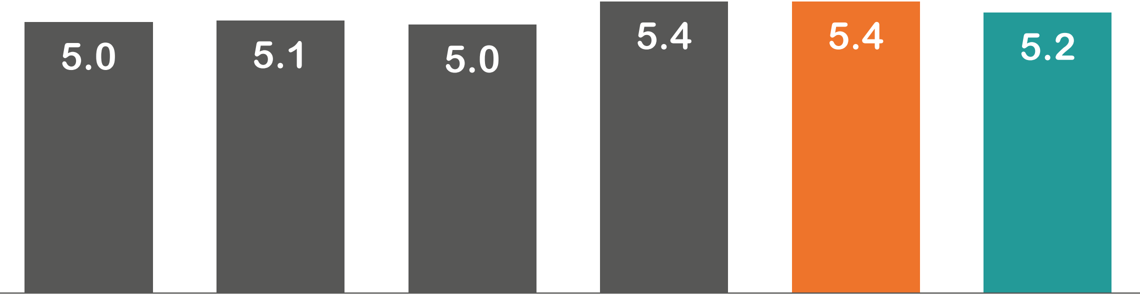
		Q1 2019		Q2 2019	Q2 comments
OCF (Pro forma)		$1,078m		$1,078m	• Pro forma for TSAs including VOD $38m, Sunrise $22m
P&E ADDITIONS		(640)		(605)	
OFCF (Pro forma)		438		473	• Includes ~$83m negative incremental OFCF contribution from Lightning
INTEREST / DERIVATIVES (Pro forma for UPC Continuing Ops)		(561)		83	• Derivative flows only, no interest bullet payments in Q2
CASH TAX		(181)		(70)	• Prior year's US & Polish tax liabilities
VODAFONE ZIGGO JV (Dividend & Interest)		-		25	• Interest only, dividend planned for H2
		(304)		511	
Working Capital	(270)		23		• Step down in P&E spend from Q4 2018 & various UK supplier cycle impacts
Operational Finance	(17)		13		
Restructuring & Other	(35)		(1)		
		(322)		35	• Expect to be positive for these three working capital categories YoY in FY19
ADJUSTED FCF (Pro forma)		$(626m)		$546	

(1) Pro forma Adjusted FCF incorporates our preliminary estimate of (i) assumed interest and related derivative payments that were made by the UPC Holding continuing operations during the period and (ii) the net cash flows that we would have received from transitional services agreements if the sale of the remaining Discontinued Operations and UPC Switzerland had occurred on January 1, 2019. A reconciliation of our Adjusted FCF guidance for 2019 to a U.S. GAAP measure is not provided as 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.

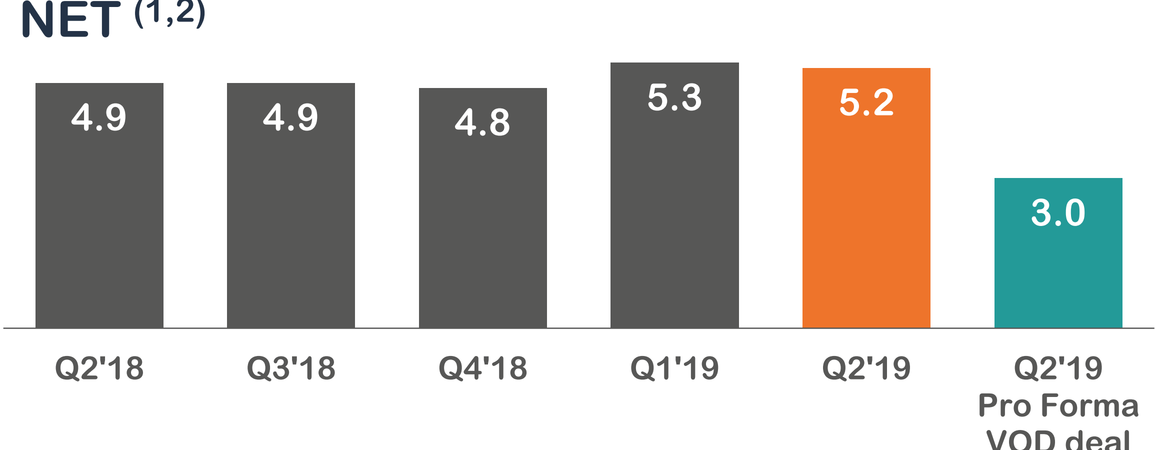
BALANCE SHEET

Committed to 4-5x target leverage

GROSS (1,2)



NET (1,2)



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

(2) To reflect an estimated pro forma view for the sale of assets to Vodafone, we have made adjustments including (i) to remove disposed OCF and attributed debt (ii) to include TSA income (iii) to include net cash proceeds of $11.3bn and (iv) to reflect repayment of UPC term loan

LEVERAGE FRAMEWORK

- Committed to 4-5x range
- De-risked capital structure:
  - Average tenor ~7 years, no material near-term maturities
  - Fully hedged FX & interest rate exposure, swapped WACD: 4.1%

RECENT ACTIVITY & NEXT STEPS

- Repaid $1.6bn UPC term loan
  - UPC at 4.6x Q2 L2QA
- Upon sale of UPC Switzerland:
  - Bonds transfer to Sunrise
  - Re-lever Poland/Slovakia to ~4x

CONCLUSIONS

Major strategic and operational milestones being achieved

- Sale of UPC Switzerland remains on track, business fundamentals improving
- U.K. price rise announced and Sky content renegotiation completed
- Strong underlying OFCF & FCF generation
- Reconfirming all 2019 guidance targets:

Continuing Operations (excluding Switzerland)

Rebased OCF	P&E Additions[(1)]	Adjusted FCF[(1, 2)]
Flat to down	~$2.7 billion at guidance FX	~$550-$600 million Pro Forma basis

(1) Based on EUR/USD 1.13; GBP/USD 1.30
(2) Guidance of $550-$600 million incorporates our preliminary estimate of (a) assumed interest and related derivative payments that were made by UPC Holding continuing operations during the period and (b) the net cash flows that we would have received from transitional services agreements if the sale of the remaining Discontinued Operations and UPC Switzerland had occurred on January 1, 2019. For additional details, see the information and reconciliation included within the glossary. A reconciliation of our Adjusted FCF guidance for 2019 to a U.S. GAAP measure is not provided as 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.

EXECUTIVE SUMMARY

FINANCIAL RESULTS

APPENDIX

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 and OCF for the three and six months ended June 30, 2018 to (i) include the pre-acquisition revenue and OCF of entities acquired during 2018 in our rebased amounts for the three and six months ended June 30, 2018 to the same extent that the revenue and OCF of these entities are included in our results for the three and six months ended June 30, 2019, (ii) include revenue and costs for the temporary elements of transitional and other services provided to the VodafoneZiggo JV, 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 and six months ended June 30, 2019 and (iii) reflect the translation of our rebased amounts for the three and six months ended June 30, 2018 at the applicable average foreign currency exchange rates that were used to translate our results for the three and six months ended June 30, 2019. We have reflected the revenue and OCF 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 and OCF of these entities on a basis that is comparable to the corresponding post-acquisition amounts that are included in our historical results or that the pre-acquisition financial statements we have relied upon do not contain undetected errors. The adjustments reflected in our rebased amounts have not been prepared with a view towards complying with Article 11 of Regulation S-X. In addition, the rebased growth percentages are not necessarily indicative of the revenue and OCF that would have occurred if these transactions had occurred on the dates assumed for purposes of calculating our rebased amounts or the revenue and OCF that will occur in the future. The rebased growth percentages have been presented as a basis for assessing growth rates on a comparable basis, and are not presented as a measure of our pro forma financial performance.

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

	Revenue		OCF	
	Three months ended June 30, 2018	Six months ended June 30, 2018	Three months ended June 30, 2018	Six months ended June 30, 2018
	in millions			
Acquisitions	$ 15.2	$ 31.5	$ 2.1	$ 3.7
Dispositions(i)	5.7	18.3	4.2	14.0
Foreign Currency	(158.8)	(367.3)	(66.1)	(150.0)
Total decrease	$ (137.9)	$ (317.5)	$ (59.8)	$ (132.3)

(i) Includes rebase adjustments related to agreements to provide transitional and other services to the VodafoneZiggo JV, 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 and OCF of $5.7 million and $4.2 million and $18.3 million and $15.3 million, respectively, for the three and six months ended June 30, 2018.

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 condensed 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 and the duct leases in Germany that we assumed in connection with certain acquisitions), with each item excluding any cash provided or used by our discontinued operations. We believe that our presentation of Adjusted Free Cash Flow provides useful information to our investors because this measure can be used to gauge our ability to service debt and fund new investment opportunities. Adjusted Free Cash Flow should not be understood to represent our ability to fund discretionary amounts, as we have various mandatory and contractual obligations, including debt repayments, which are not deducted to arrive at this amount. Investors should view Adjusted Free Cash Flow as a supplement to, and not a substitute for, U.S. GAAP measures of liquidity included in our condensed consolidated statements of cash flows.

The following table provides a reconciliation of our net cash provided by operating activities to Adjusted Free Cash Flow for the indicated periods. In addition, in order to provide information regarding the changes to our Adjusted Free Cash Flow that we expect will occur following the sale of the remaining Discontinued Operations and the Switzerland Disposal Group, we also present Adjusted Free Cash Flow on a pro forma basis for three and six months ended June 30, 2019 as if the sale of the remaining Discontinued Operations and the Switzerland Disposal Group had been completed on January 1, 2019.

	Three months ended June 30,			
	2019	2018	2019	2018
	Continuing operations		Discontinued Operations [i]	
	in millions			
Net cash provided by operating activities	$ 1,322.2	$ 1,457.8	$ 370.1	$ 528.0
Cash payments for direct acquisition and disposition costs	5.6	3.2	—	—
Expenses financed by an intermediary[ii]	522.1	409.1	138.1	77.8
Capital expenditures, net	(301.6)	(310.6)	(102.5)	(122.4)
Principal payments on amounts financed by vendors and intermediaries	(977.6)	(1,673.1)	(216.8)	(132.3)
Principal payments on certain finance leases	(18.7)	(19.6)	(1.9)	(3.1)
Adjusted FCF	552.0	$ (133.2)	$ 187.0	$ 348.0
Pro forma adjustments related to the sale of the remaining Discontinued Operations and the Switzerland Disposal Group:				
Switzerland Disposal Group[iii]	(65.0)			
Interest and derivative payments[iv]	(1.0)			
Transitional services agreements[v]	60.0			
Pro forma Adjusted FCF[vi]	$ 546.0			

	Six months ended June 30,			
	2019	2018	2019	2018
	Continuing operations		Discontinued Operations [i]	
	in millions			
Net cash provided by operating activities	$ 1,628.5	$ 2,128.1	$ 829.2	$ 1,137.0
Cash payments for direct acquisition and disposition costs	18.0	4.8	—	—
Expenses financed by an intermediary[ii]	1,086.1	916.4	276.9	128.3
Capital expenditures, net	(632.9)	(794.8)	(213.1)	(284.2)
Principal payments on amounts financed by vendors and intermediaries	(2,140.4)	(3,349.0)	(426.4)	(253.2)
Principal payments on certain finance leases	(31.8)	(37.6)	(4.6)	(6.1)
Adjusted FCF	(72.5)	$ (1,132.1)	$ 462.0	$ 721.8
Pro forma adjustments related to the sale of the remaining Discontinued Operations and the Switzerland Disposal Group:				
Switzerland Disposal Group[iii]	(105.9)			
Interest and derivative payments[iv]	(22.5)			
Transitional services agreements[v]	121.0			
Pro forma Adjusted FCF[vi]	$ (79.9)			

i. For the 2019 periods, our Discontinued Operations include our former operations in Germany, Hungary, Romania and the Czech Republic, which were sold on July 31, 2019, and our former DTH business, which was sold on May 2, 2019. For the 2018 period, our Discontinued Operations also include our former operation in Austria through July 31, 2018.

ii. 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.

iii. The Switzerland Disposal Group is included within our Continuing Operations Adjusted FCF. In connection with the pending disposition, Sunrise will acquire the Switzerland Disposal Group, the UPC Notes, associated derivatives and certain other debt items. As a result, this pro forma adjustment represents the Adjusted FCF of the Switzerland Disposal Group, including 100% of the interest and related derivative payments made during the applicable period related to the UPC Notes.

iv. Represents the estimated interest and related derivative payments that have been made by UPC Holding in relation to the continuing UPC operations in Poland and Slovakia during the applicable period. These estimated payments are calculated based on Poland and Slovakia's pro rata share of UPC Holding's OCF and UPC Holding's aggregate interest and derivative payments during the applicable period. Although we believe that these estimated payments represent a reasonable estimate of the annual interest and related derivative payments that will occur in relation to the continuing operations in Poland and Slovakia, no assurance can be given that the actual interest and derivative payments will be equivalent to the amounts presented. No pro forma adjustments are required with respect to Unitymedia's interest and derivative payments as substantially all of Unitymedia's debt and related derivative instruments are direct obligations of entities within the Vodafone Disposal Group. As a result, the interest and related derivative payments associated with such debt and derivative instruments of Unitymedia are included in discontinued operations.

GLOSSARY

v. Represents our preliminary estimate of the net cash flows that we would have received from transitional services agreements if the sale of the remaining Discontinued Operations and the Switzerland Disposal Group 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 remaining Discontinued Operations and Switzerland Disposal Group, less the estimated incremental costs that we expect to incur to provide such transitional services. As a result, the pro forma adjustments during the three and six months ended June 30, 2019 include $37.8 million and $76.0 million related to our discontinued operations in Germany, Hungary, Romania and the Czech Republic, respectively, $21.9 million and $44.0 million related to the Switzerland Disposal Group, respectively, and $0.3 million and $1.0 million related to our discontinued DTH business, respectively.

vi. Represents the Adjusted FCF that we estimate would have resulted if the sale of the remaining Discontinued Operations and the Switzerland Disposal Group 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 cable customer relationships for the period. ARPU per average mobile subscriber is calculated by dividing residential mobile and SOHO revenue for the indicated period by the average number of mobile subscribers for the period. Unless otherwise indicated, ARPU per cable customer relationship or mobile subscriber is not adjusted for currency impacts. ARPU per RGU refers to average monthly revenue per average RGU, which is calculated by dividing the average monthly subscription revenue from residential and SOHO services for the indicated period, by the average number of the applicable RGUs for the period. Unless otherwise noted, ARPU in this presentation is considered to be ARPU per average cable customer relationship or mobile subscriber, as applicable. Cable customer relationships, mobile subscribers and RGUs of entities acquired during the period are normalized. In addition, for purposes of calculating the percentage change in ARPU on a rebased basis, we adjust the prior-year subscription revenue, cable customer relationships, mobile subscribers and RGUs, as applicable, to reflect acquisitions, dispositions, FX and the January 1, 2018 adoption of the new revenue recognition standard (ASU 2014-09, Revenue from Contracts with Customers) on a comparable basis with the current year, consistent with how we calculate our rebased growth for revenue and OCF.

ARPU per Mobile Subscriber: Our ARPU per mobile subscriber calculation that excludes interconnect revenue refers to the average monthly mobile subscription revenue per average mobile 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.

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

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

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

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

GLOSSARY

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

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

Leverage and Liquidity: Consistent with how we calculate our leverage ratios under our debt agreements, we calculate our debt ratios on a basis that includes both our continuing and discontinued operations, with the gross and net debt ratios defined as total debt and net debt, respectively, divided by annualized OCF of the latest quarter. Net debt is defined as total debt less cash and cash equivalents. For purposes of these calculations, debt is measured using swapped foreign currency rates, consistent with the covenant calculation requirements of our subsidiary debt agreements, and excludes the loans backed or secured by the shares we hold in ITV plc and Lions Gate Entertainment Corp. We have not presented leverage ratios on a continuing operations basis as we believe that such a presentation would overstate our leverage and would not be representative of the actual leverage ratios that we will report once all dispositions are completed. For additional information, see note 4 to the condensed consolidated financial statements included in our 10-Q. The pro forma net leverage ratio for the Vodafone transaction is adjusted to reflect certain items, including (i) the adjustments included in our pro forma liquidity calculation, as described above, (ii) the removal of the OCF of our operations in Germany, Hungary, Romania and the Czech Republic and (iii) the removal of the debt associated with our operations in Germany, including adjustments associated with related derivative instruments.

Liquidity refers to cash and cash equivalents plus the maximum undrawn commitments under subsidiary borrowing facilities, without regard to covenant compliance calculations. Pro forma liquidity for the Vodafone transaction is adjusted to reflect certain items, including (i) our preliminary estimate of the net cash and cash equivalents received upon closing of the transaction of €10.1 billion ($11.3 billion based on an FX rate of EUR/USD 1.12) and (ii) the prepayment of $1.6 billion outstanding principal amount of term loans under the UPC Holding Bank Facility.

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-Q. 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 June 30,		Six months ended June 30,	
	2019	2018	2019	2018
	in millions			
Operating income	$ 148.7	$ 264.1	$ 254.2	$ 381.7
Share-based compensation expense	87.0	45.5	154.3	88.2
Depreciation and amortization	921.8	964.0	1,861.4	2,004.7
Impairment, restructuring and other operating items, net	33.2	29.9	104.1	90.6
Total OCF	$ 1,190.7	$ 1,303.5	$ 2,374.0	$ 2,565.2

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.

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

GLOSSARY

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, DTH Subscriber, Internet Subscriber or Telephony Subscriber. A home, residential multiple dwelling unit, or commercial unit may contain one or more RGUs. For example, if a residential customer in our U.K. market subscribed to our enhanced video service, fixed-line telephony service and broadband internet service, the customer would constitute three RGUs. Total RGUs is the sum of Basic Video, Enhanced Video, DTH, Internet and Telephony Subscribers. RGUs generally are counted on a unique premises basis such that a given premises does not count as more than one RGU for any given service. On the other hand, if an individual receives one of our services in two premises (e.g., a primary home and a vacation home), that individual will count as two RGUs for that service. Each bundled cable, internet or telephony service is counted as a separate RGU regardless of the nature of any bundling discount or promotion. Non-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.

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

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

YoY: Year-over-year.

APPENDIX - LIGHTNING

Revenue and OCF of UKIE's Project Lighting are presented on and incremental basis. For example, OCF growth and OCF margins (and therefore OFCF growth and margins) for UKIE's Project Lightning represents "Incremental OCF", which is supplemental non-GAAP information that has a different meaning than the OCF we report for our operating segments that are used by our chief operating decision maker to evaluate segment operating performance.

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