LIBERTY GLOBAL PLC

INVESTOR CALL | Q4 2020

February 16, 2021

“SAFE HARBOR”

Forward-Looking Statements + Disclaimer

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. In this context, forward-looking statements often address expected future business and financial performance and financial condition, and often contain words such as “expect,” “anticipate,” “intend,” “plan,” “believe,” “seek,” “see,” “will,” “would,” “may,” “target,” and similar expressions and variations or negatives of these words. These forward-looking statements may include, among other things, statements with respect to our strategies and priorities, future growth prospects and opportunities, results of operations, uses of cash, and other measures that may impact our financial performance; expectations regarding Rebased Adjusted EBITDA, Rebased OFCF and Adjusted FCF and factors impacting such measures; anticipated closing of the VM-O2 joint venture and the expected benefits thereof, including synergies; expectations regarding the acquisition of Sunrise and the benefits thereof, including synergies; expectations regarding our share repurchase program; expectations with respect to our ventures portfolio; anticipated impacts of the COVID-19 pandemic; expectations with respect to the development, launch and benefits of our innovative and advanced products and services, including gigabit speeds, new technology and next generation platform rollouts or launches; the strength of our balance sheet and tenor of our third-party debt; expectations with respect to our segment operations including their operating and financial performance; 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, legislative, political and regulatory factors, and the impact of weather conditions, natural disasters, or any epidemic, pandemic or disease outbreak (including COVID-19); our and our affiliates’ ability to obtain regulatory approval and satisfy regulatory conditions associated with acquisitions and dispositions, including with respect to the proposed transactions; 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, including any potential litigation that may be instituted with respect to the proposed transactions or other material transactions; that the proposed transactions may not be completed on anticipated terms and timing or completed at all; our and Telefonica S.A.’s respective affiliates’ ability to successfully integrate the combined businesses of the UK Joint Venture and realize anticipated efficiencies and synergies; our ability to successfully integrate Sunrise with our Swiss operations and realize anticipated efficiencies and synergies; the potential impact of unforeseen liabilities, future capital expenditures, revenues, expenses, economic performance, indebtedness, financial condition on the future prospects and business of the UK Joint Venture and the combined Swiss business after the consummation of the proposed transactions; expected financing and recapitalization transactions undertaken in connection with the proposed transactions and risks associated with such transactions; 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 and access; our and our affiliates’ ability to adequately forecast and plan future network requirements including the costs and benefits 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 associated with network expansions; other factors detailed from time to time in our filings with the U.S. Securities and Exchange Commission; and management’s response to any of the aforementioned factors. For additional information on identifying factors that may cause actual results to vary materially from those stated in forward-looking statements, please see our filings with the U.S. 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.

Presentation of Continuing, Discontinuing & Held for Sale Operations:

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 are collectively referred to herein as the “Discontinued Operations” and have all been accounted for as discontinued operations for the three and nine months ended September 30, 2019, in our September 30,2020 Form 10-Q. On May 7, 2020, we entered into an agreement with, among others, Telefonica S.A. (Telefonica). Pursuant to which, Liberty Global and Telefonica agreed to form a 50:50 joint venture, which will combine Virgin Media’s operations in the U.K. (the U.K. JV Entities) with Telefonica’s mobile business in the U.K. As such, the U.K. JV Entities are accounted for as held for sale in our December 31st, 2020 Form 10-K.

Additional Information Relating to Defined Terms:

Please refer to the Appendix at the end of this presentation, as well as our press release dated February 15, 2021 and our SEC filings, for the definitions of the following terms which may be used herein, including: Rebased Growth, Adjusted EBITDA, 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.

EXECUTIVE SUMMARY

FINANCIAL RESULTS

APPENDIX

2020 HIGHLIGHTS

1 STRONG GROWTH DESPITE COVID

- People & networks resilient; supporting our customers and communities
- +81k fixed customer net adds (vs -74k in PY)
- +242k broadband net adds (up 3x vs prior year) and +513k mobile postpaid adds (up 3%)
- Revenue down due to COVID, slightly positive otherwise; EBITDA, OFCF exceed expectations
- FCF up ~39% (2) and ahead of guidance

3 FMC CHAMPIONS DELIVERING

- Sunrise transaction closed in Q4; integration plan well underway
- Virgin Media-O2 JV on track for approval mid-year; creates FMC powerhouse
- $11b(3) of synergies validated in CH and UK
- Vodafone Ziggo exceeds EBITDA guidance; original synergies achieved one year early
- Telenet drives convergence to new highs

2 MOMENTUM CONTINUED IN Q4

- Churn & NPS trending at improved/record levels
- Virgin Media saw record postpaid mobile adds and its best customer growth since Q3-17
- UPC Swiss hits positive broadband net adds; another strong quarter for Sunrise
- Product deliveries accelerate: +10m 1-Gig homes now marketable, TV360, Smart Wi-Fi

4 2021 PRIORITIES ARE CLEAR

- Committed to DEI and ESG programs
- Positive revenue growth in core markets
- Evaluate accretive fixed network strategies
- Optimize venture portfolio; valued @ $4/share (4)
- Grow FCF ~25% and FCF/share even higher
- Continue buyback plans; $1b authorized

1) Please refer to the Appendix for definitions and non-GAAP reconciliations, where applicable.
2) YoY Adjusted FCF growth rate is based on 2019 pro forma FCF which assumed the sale of our discontinued operations in Germany, Hungary, Romania, the Czech Republic and our DTH business had been completed on January 1, 2019.
3) Includes 100% of expected synergies from the UK/O2 JV
4) Reflects estimated fair value as of February 10, 2021 divided by outstanding shares as of 31st January 2021

FY RESULTS[1]

OPERATIONS

	ACTUAL	YOY
CUSTOMER NET ADDS	+81k	+155k
FIXED CUSTOMER REBASED ARPU	$59.77	-1%
BROADBAND NET ADDS	+242k	+163k
MOBILE POSTPAID NET ADDS	+513k	+17k
FIXED MOBILE CONVERGENCE	28.3%	+270bps

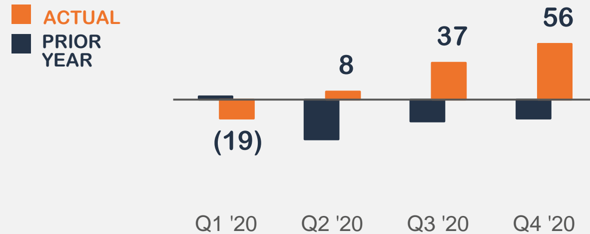
FINANCIALS

	ACTUAL	YOY
REBASED REVENUE	$12.0b	-1.5%
COVID IMPACT ON REVENUE	~$200m	-1.8%
REBASED ADJUSTED EBITDA	$4.9b	-4%
REBASED P+E ADDITIONS	$2.7b	-10%
REBASED OFCF	$2.2b	+5%
ADJUSTED FCF(2)	$1.1b	+39%

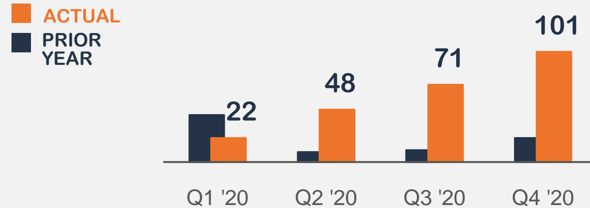
ACCELERATING SUBSCRIBER GROWTH SUPPORTED BY PRODUCT INNOVATION

CONSISTENT QUARTERLY IMPROVEMENT

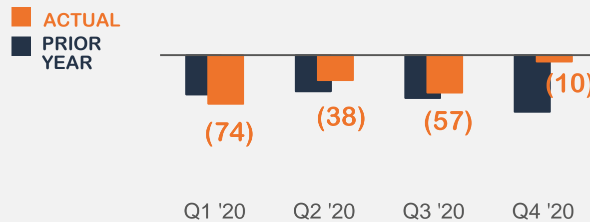
FIXED CUSTOMER NET ADDS
(000's, incl. SOHO)



BROADBAND NET ADDS
(000's, incl. SOHO)

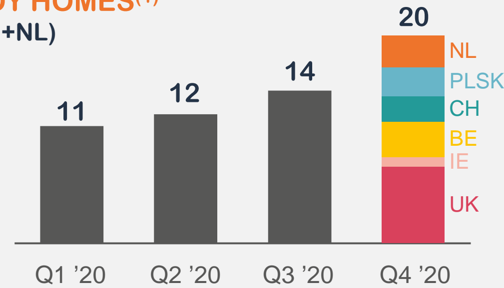


VIDEO NET ADDS
(000's, incl. SOHO)



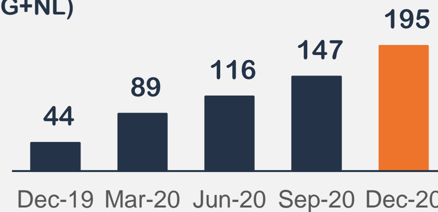
BROADBAND SPEED LEADERSHIP

GIGABIT COMMERCIAL READY HOMES[1]
(M, LG+NL)

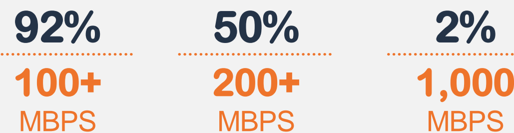


(1) Includes Gigabit HP where there is not a new area connected; earlier connected area's volumes are increasing

GIGABIT SPEED RGUS
(000's, LG+NL)

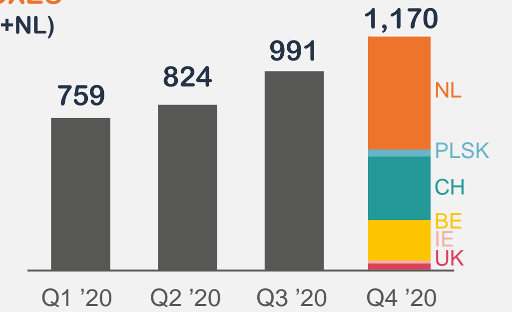


CUSTOMERS TAKING FASTER SPEEDS
(Dec '20)

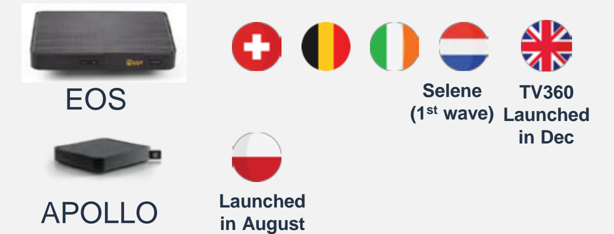


NEW PRODUCT LAUNCHES

HZN4 BOXES
(000's, LG+NL)



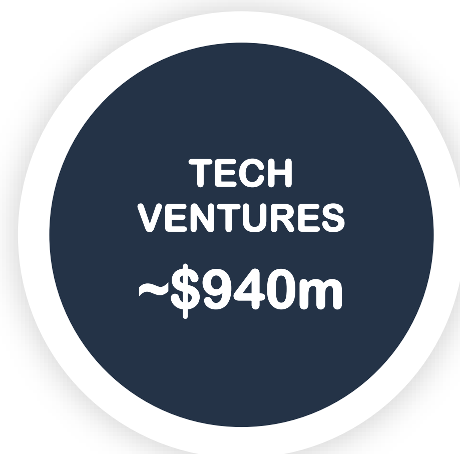
HZN4 MARKETS



UK Intelligent WiFi
(Jan-11) optimizes in-home network

Virgin Media's 5G
(Jan-25) next-gen mobile experience

VENTURES PORTFOLIO
OVER $4 PER SHARE OF EQUITY VALUE [1,2]



40+
COMPANIES

8
COMPANIES

2
COMPANIES

2
COMPANIES

Tech Ventures

- **Nine unicorns** (existing and potential)
- **Skillz:** $14m investment in gaming platform valued at $452m as of Feb-21[3]
- **Plume:** $25m investment in Smart WiFi supplier valued at $171m in funding round
- Significant **strategic fit** with operating companies

Content / Sports

- **ITV** collar unwind underway; now long 7% at 75p average price
- **Univision** investment closed in December
- **All3Media** 50% stake worth >$300m[4]
- **Formula E** 33% stake worth >$250m; Season 7 commencing

Infrastructure

- **EdgeConneX:** rolled investment into EQT acquisition at $75m (>2x return)
- Multiple initiatives underway to build or monetize owned or consolidated **infrastructure assets** (not included in value)

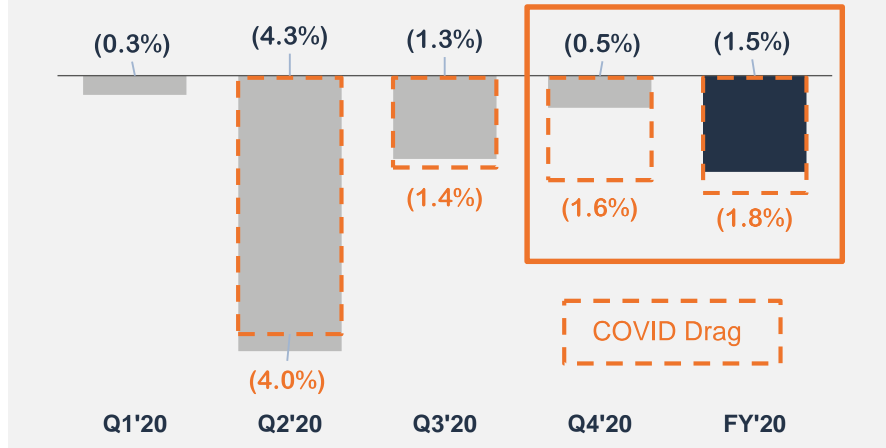
1) Reflects estimated fair value as of February 10, 2021 divided by outstanding shares as of 31st January 2021
2) Values reflect certain fair value adjustments and exclusions vs 10K investments disclosure pf $6,954m, predominantly excluding Vodafone Ziggo and SMAs, making certain fair value adjustments to equity method investments and reflecting latest trading for public securities
3) Reflecting Skillz share price as of February 10, 2021
4) Includes both our 50% share of the equity and our investment in Second Lien debt

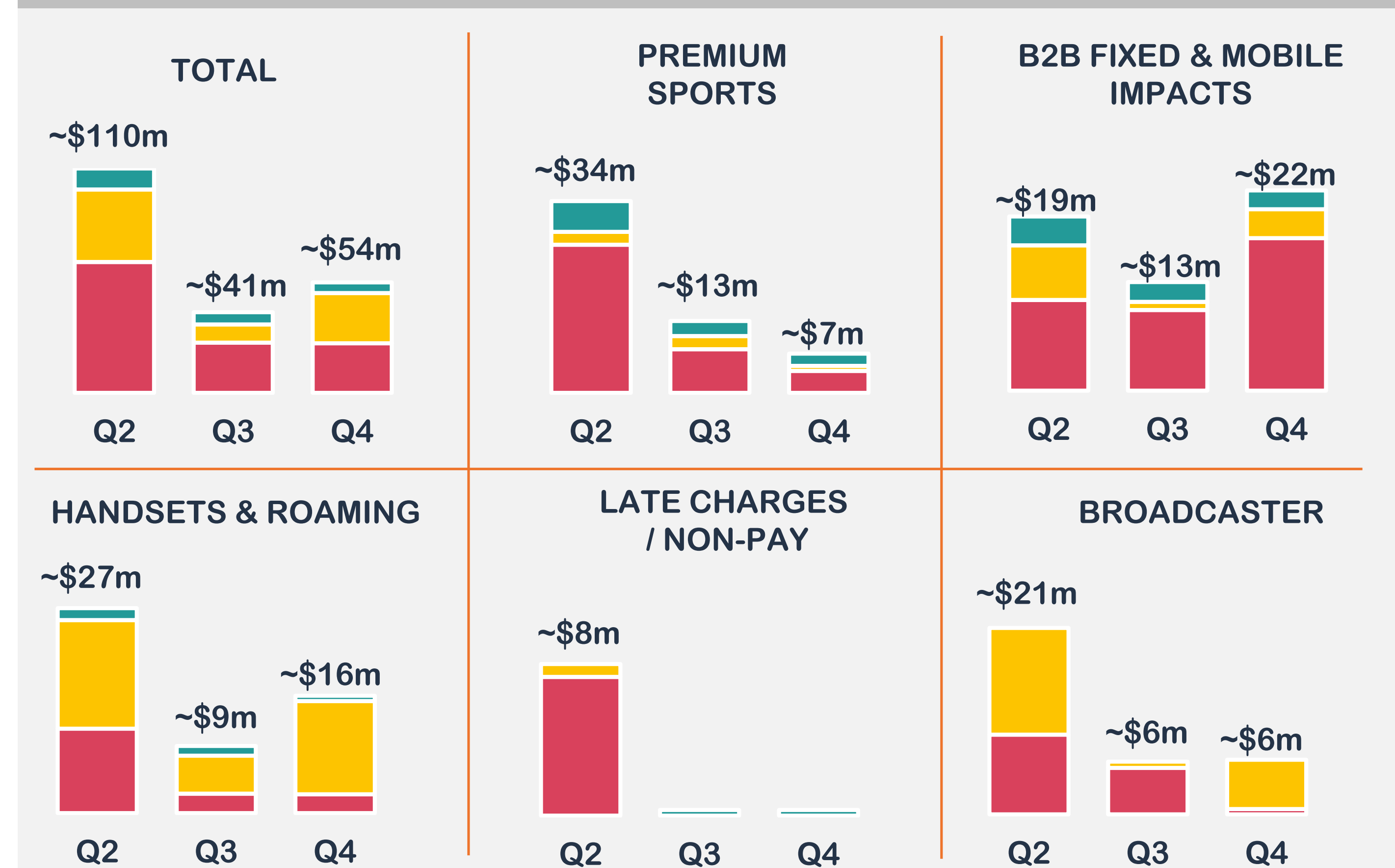
EXECUTIVE SUMMARY

FINANCIAL RESULTS

APPENDIX

UNDERLYING REVENUE STABLE



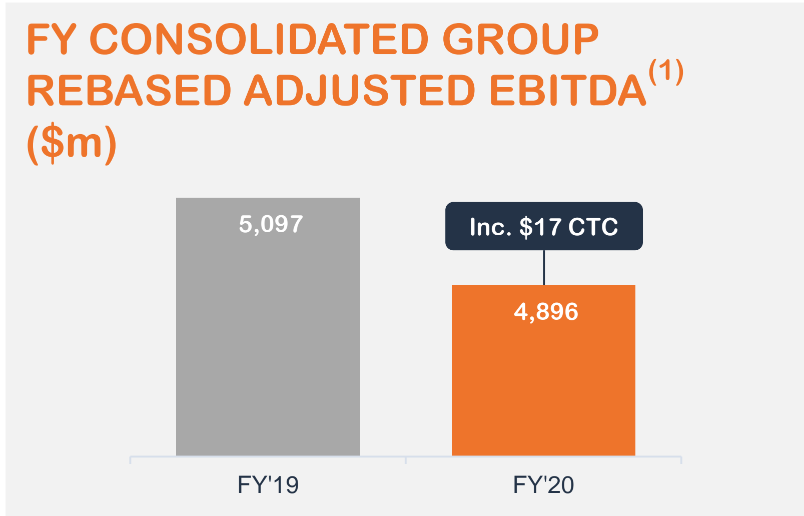


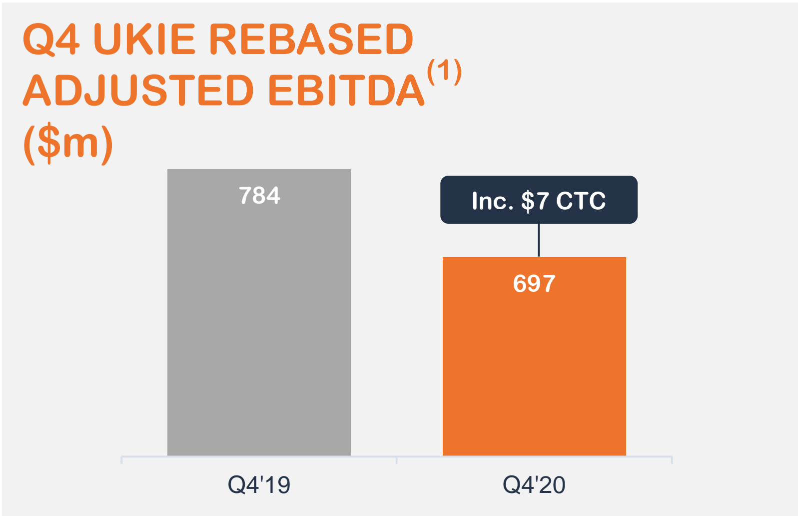
- Over $200m[2] COVID impact to FY Revenue
- $54m[2] COVID impact in Q4
- Limited impact on Adj EBITDA given low margin sales and sports programming credits received

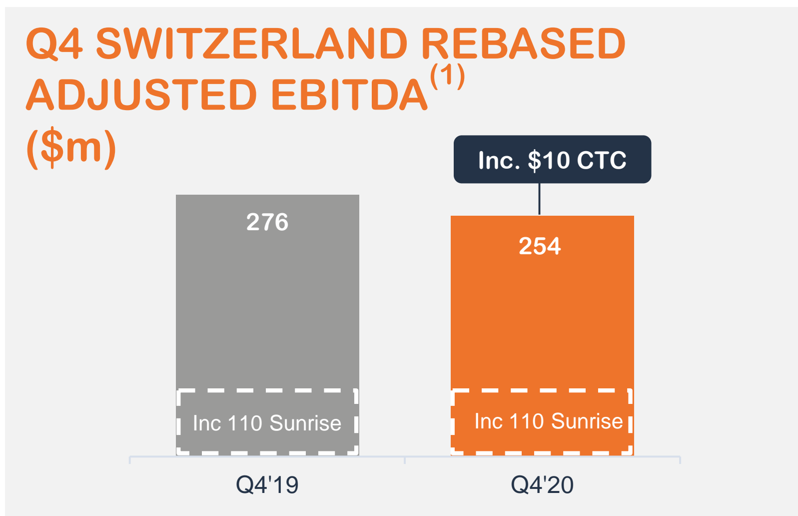
1) Revenue growth rates presented on a rebased basis. See Appendix for definitions and non-GAAP reconciliations, where applicable
2) Excludes customer impacts including postponed UK price rise, churn and downspin effects

ADJ EBITDA IN LINE WITH EXPECTATIONS

Costs to capture (CTC)







- -3.9% FY rebased Adj EBITDA in line with consolidated guidance
- TNET FY Adj EBITDA stable[2]
- VZ outperformed guidance with 6% FY 2020 Adj EBITDA growth.

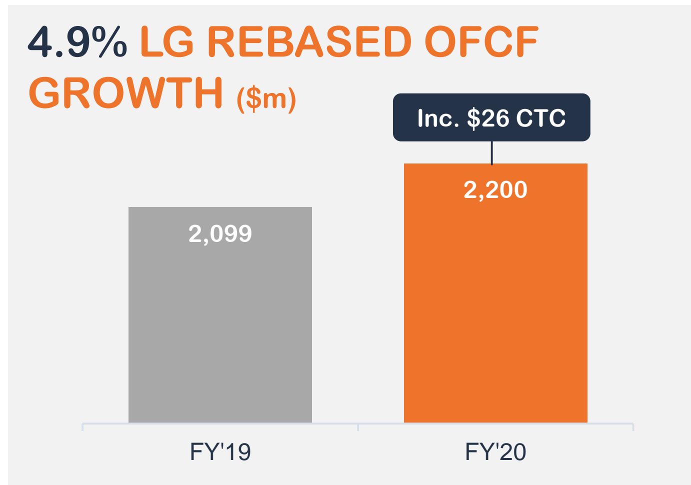
- Adj EBITDA in line with plan
- Significant growth investments in pre-merger CTC, digital/on-shoring and marketing weigh on Q4
- Q4 further affected by EOCN/ABTN, network taxes & deferred price rise

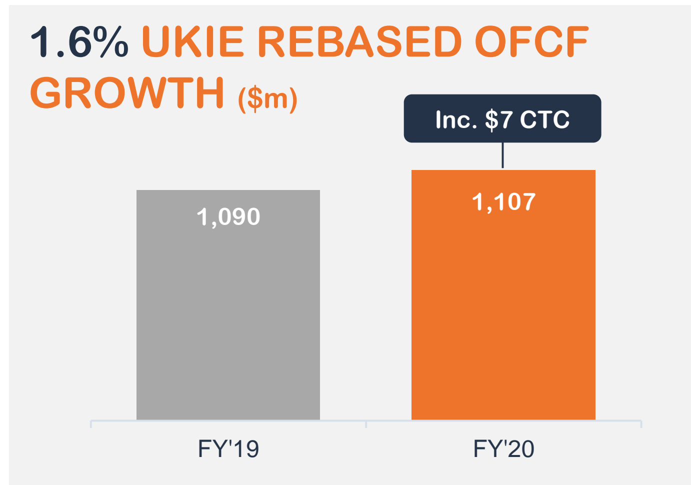
- Underlying trends gradually improving; -7.9% rebased Q4 YoY
- Including $10m pre-merger CTC spend causing a 4% drag
- Q4 Sunrise impact rebased as flat YoY

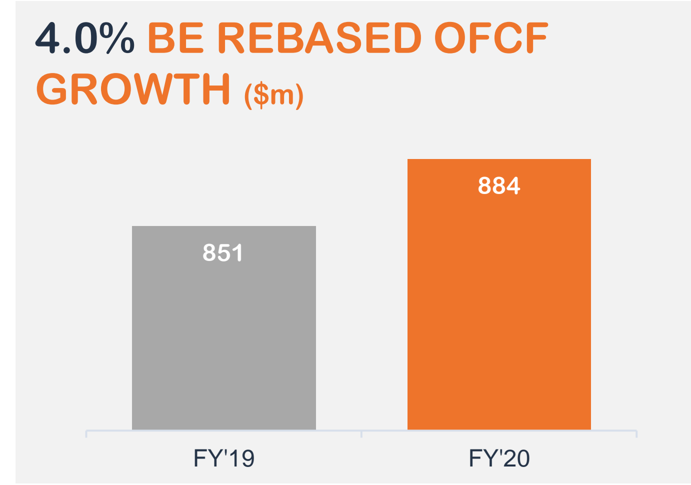
1) 2019 Adjusted EBITDA absolute amounts and Adjusted EBITDA growth rates presented on a rebased basis including the impact of the Centrally-held P&E Attribution. See the Appendix for definitions and non-GAAP reconciliations
2) 0.2% rebased growth US GAAP basis, company reported IFRS rebased growth of 0.5%

DELIVERED 5% OFCF GROWTH YOY[1]

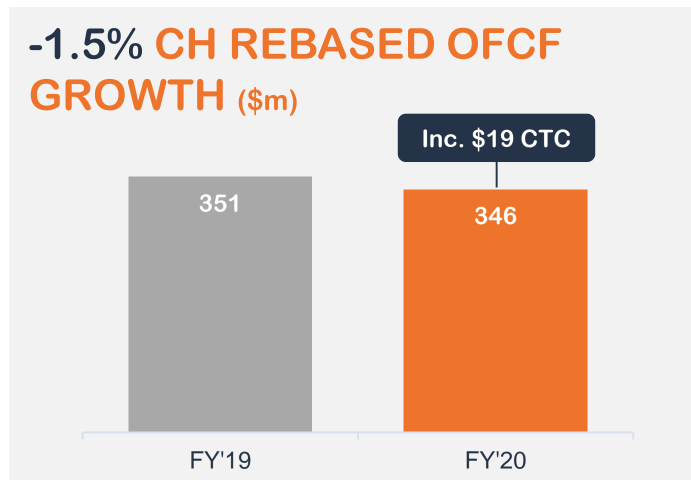
Costs to capture (CTC)

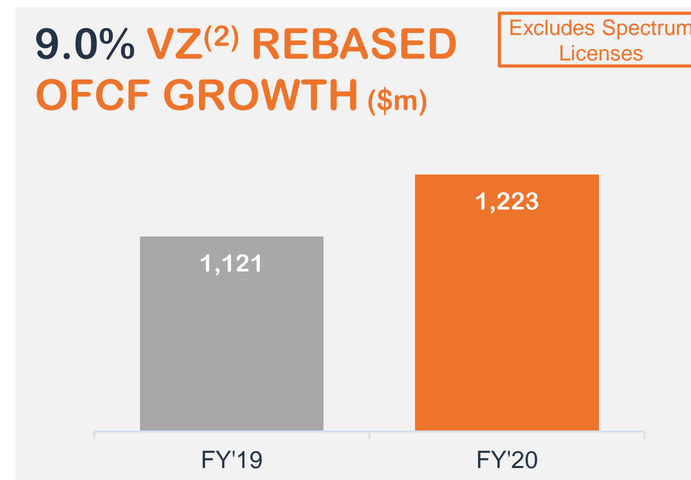






- Delivered guidance of mid-single-digit LG OFCF growth in 2020[2] despite CTC
- Rebased OFCF growth in all markets, except CH due to pre-merger CTC





1) 2019 OFCF absolute amounts and YoY growth rates presented on a rebased basis including the impact of the Centrally-held P&E Attribution. See the Appendix for definitions and non-GAAP reconciliations.
2) Non-consolidated. Reflects 100% of VodafoneZiggo OFCF

39% FCF GROWTH YOY [1]

Delivered $1.1bn 2020 FCF, despite FX drags worth ~$60m vs guidance

$m	FY 2019 [5]	FY 2020
OFCF pre-Lightning P&E	2,459	2,530
NET INTEREST	(1,118)	(1,121)
CASH TAX	(358)	(248)
VODAFONE ZIGGO JV	214	299
	$1,197	$1,460
WORKING CAPITAL [2]	(37)	(61)
ADJUSTED FCF pre-Lightning P&E [3]	$1,160	$1,399
LIGHTNING P&E [4]	(390)	(329)
ADJUSTED FCF	$770	$1,070

1) Adjusted Free Cash Flow is a non-GAAP measure. See the Appendix for definitions and non-GAAP reconciliations. YoY growth rate is based on 2019 pro forma FCF which assumed the sale of our discontinued operations in Germany, Hungary, Romania, the Czech Republic and our DTH business had been completed on January 1, 2019.
2) Includes working capital, operational finance (vendor finance) and restructuring
3) Pre-Lightning P&E is a non-GAAP measure, see the Appendix for definitions and non-GAAP reconciliations, where applicable
4) Lightning Construction P&E includes construction P&E only. Excludes Customer Premises Equipment
5) Adjusted FCF for FY 2019 is presented on a pro forma basis, which assumes the sale of our discontinued operations in Germany, Hungary, Romania, the Czech Republic and our DTH business had been completed on January 1, 2019.

2021 OUTLOOK [1,2]

LG Adjusted FCF of $1.35bn
(assuming VMO2 transaction closes mid-year)

GUIDANCE

Returning to Revenue growth overcoming regulatory headwinds

£15m pre-merger opex costs to capture in H1

Adj EBITDA & OFCF declines in low-single-digits

GUIDANCE

Returning to Revenue growth

~CHF150m costs to capture

Adj EBITDA decline in low-single-digits

OFCF decline in mid-single-digits

GUIDANCE

IFRS BASIS

Revenue growth of up to 1%

Adj EBITDA growth 1%-2%

OFCF decline around -1%

FCF of €420m - €440m

GUIDANCE

Adj EBITDA growth 1%-3%

P+E Additions to Sales 19%-21%

Cash distributions to shareholders €550m - €650m

1) LG adjusted FCF guidance reflects FX rates of EURUSD 1.23, GBPUSD 1.36, CHFUSD 1.12
2) Revenue, Adj EBITDA and OFCF guidance growth rates presented on a rebased basis. Quantitative reconciliations to net earnings/loss from continuing operations (including net earnings/loss growth rates) and cash flow from operating activities for our Adjusted EBITDA, OFCF and Adjusted FCF guidance cannot be provided without unreasonable efforts as we do not forecast (i) certain non-cash charges including; the components of non-operating income/expense, depreciation and amortization, and impairment, restructuring and other operating items included in net earnings/loss from continuing operations, nor (ii) specific changes in working capital that impact cash flows from operating activities. The items we do not forecast may vary significantly form period to period.

EXECUTIVE SUMMARY

FINANCIAL RESULTS

APPENDIX

VIRGIN MEDIA: OPERATIONS DELIVERING

Investment in innovation, digitization and network expansion creates platform for future growth

2020 KEY RESULTS[1]

+102k
CUSTOMER NET ADDS

+330k
POSTPAID MOBILE NET ADDS

(1.3%)
CUSTOMER ARPU GROWTH

(0.9%)
REVENUE

(5.0%)
ADJUSTED EBITDA

$1,107m
OFCF [2]

KEY DRIVERS OF PERFORMANCE

1 BEST CUSTOMER ADDS SINCE 2017 AND RECORD LOW CHURN

- Three consecutive quarters of customer gains in BAU and Lightning
- +426k Lightning build in 2020 at £613 CPP, reaching 2.5m cumulative
- ARPU impacted by regulated contract notifications, low margin COVID-related impacts and deferral of 2020 price rise

2 FUELED BY PRODUCT INNOVATION

- Largest 1Gig provider in U.K. (7.1m HH) and Ireland (0.9m HH)
- Positive response to Q4 TV360 launch; NPS +50pts for upgrades

3 LEVERAGING FIXED MOBILE CONVERGENCE OPPORTUNITY

- Fastest growing FMC provider: 24.3% penetration +310bps YoY

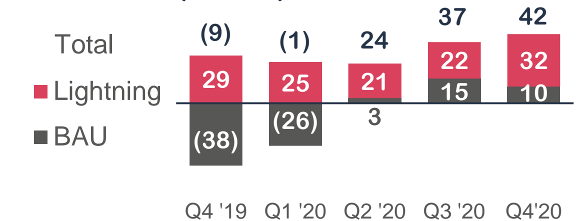
4 ACCELERATING B2B GROWTH IN WHOLESALE AND SOHO

- UKIE B2B revenue +3% driven by WS (+17%) and SOHO (+10%)
- Evolving from connectivity to an integrated digital solutions provider

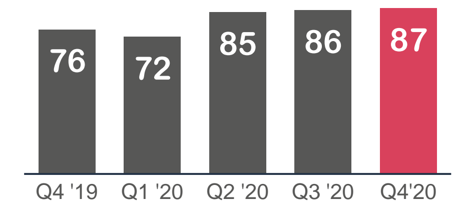
5 2021 OFF TO A STRONG START

- 4% U.K. price rise from Mar'21; customer reaction so far in-line
- Launched Intelligent WiFi Plus to improve in-home WiFi coverage
- 5G mobile service launched in the U.K. in Jan'21

FIXED LINE CUSTOMER GROWTH (000's)



POSTPAID MOBILE ADDS (000's)



(1) ARPU, Revenue, Adjusted EBITDA and OFCF growth rates presented on a rebased basis as applicable. OFCF includes both centrally-held opex allocations and centrally-held P&E attributions. (2) Includes attribution of centrally-held P&E additions of $133 million.

VIRGIN MEDIA: PROJECT LIGHTNING UPDATE

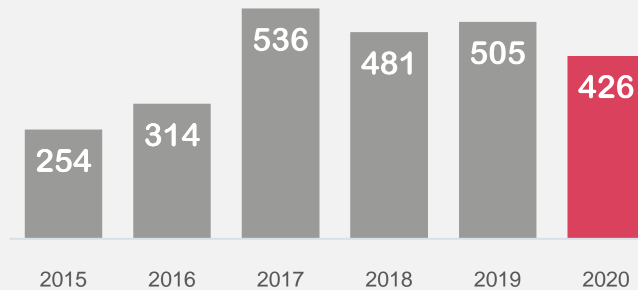
Project Lightning build continued through the global pandemic. Improved efficiency driving down cost of build

HIGHLIGHTS

- Periodic CPP improved to ~£590 in Q4 as we increased use of PIA
- PIA build cost is ~£200 less than our standard CPP, but only certain build areas are accessible by PIA
- ARPU remains in line with BAU post-discounts

CONSTRUCTION ACTIVITY

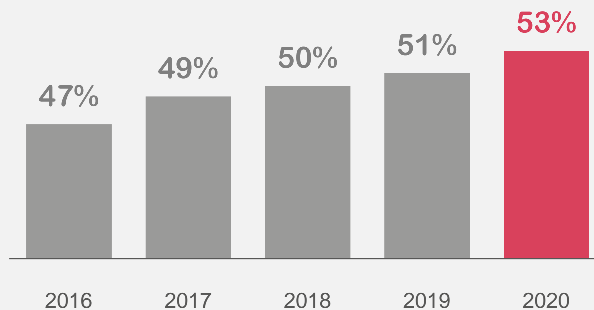
PREMISES CONSTRUCTED (000s)



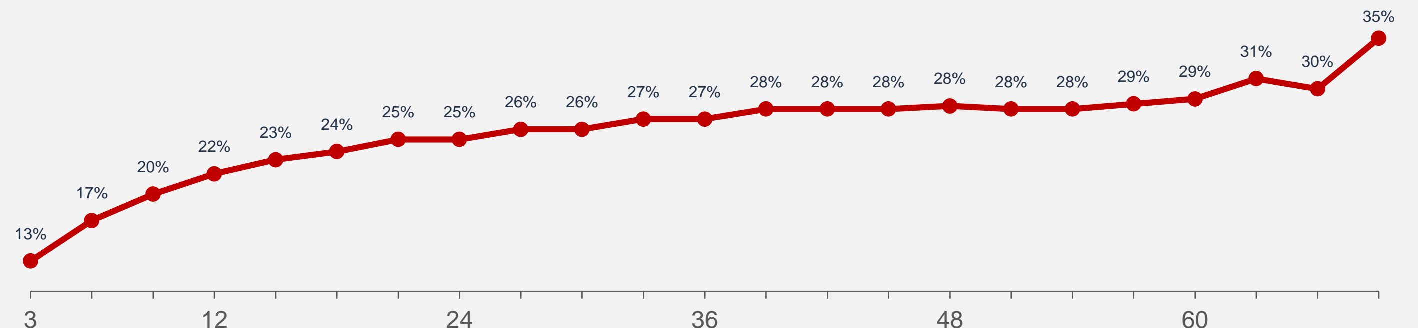
KPIs

ARPU £

NATIONAL FOOTPRINT COVERAGE



U.K. PENETRATION



SUNRISE UPC: BUILDING COMMERCIAL MOMENTUM

Leveraging convergence to create the #1 Swiss challenger

2020 KEY RESULTS(1)

(45k)
CUSTOMER NET ADDS

+59k
POSTPAID MOBILE NET ADDS

(1.8%)
CUSTOMER ARPU GROWTH

(4.5%)
REVENUE

(10.5%)
ADJUSTED EBITDA

(1.5%)
OFCF

KEY DRIVERS OF PERFORMANCE

1 CONTINUED GROWTH IN A COMPETITIVE MARKET

- Record sales at Sunrise and UPC drive growth across all product lines (+172k fixed & mobile RGU net adds in 2020)
- Net adds growth compensates for ARPU pressure
- FMC up +5% at UPC to 24%, while Sunrise leads CH with >70% FMC

2 INTEGRATION OF SUNRISE-UPC FIRMLY ON TRACK

- Combined management team in place with best leadership of both companies
- Vision, strategic priorities and roadmap established for one brand, one portfolio
- 99% of Sunrise acquired, squeeze out expected to complete in H1 '21
- All original synergy assumptions validated

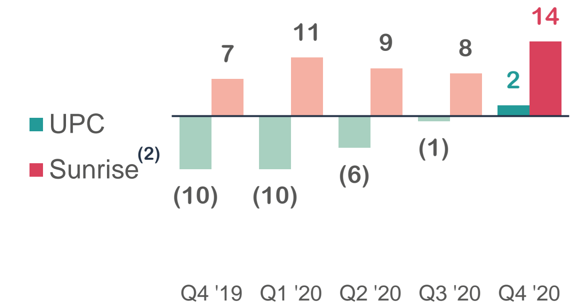
3 5G AND UPC TV INVESTMENTS PAYING OFF

- >90% 5G coverage in CH; Sunrise leading mobile provider with best 5G network
- UPC TV roll-out reaches 75% of video CPE
- Customer satisfaction at all-time highs for UPC and Sunrise

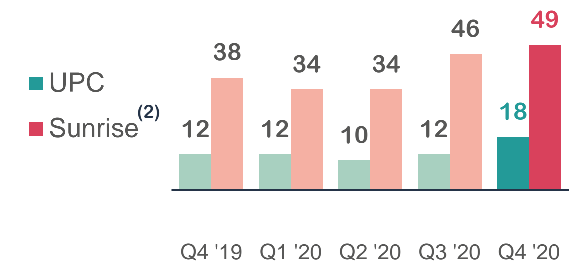
4 STRONG COMMERCIAL MOMENTUM IN Q4 '20

- UPC delivers positive broadband net adds in Q4 for first time since 2017
- Sunrise continues to deliver strong volumes across broadband and mobile

BROADBAND NET ADDS (000's)



POSTPAID MOBILE ADDS (000's)



(1) Revenue, Adjusted EBITDA and OFCF growth rates presented on a rebased basis as applicable. OFCF includes both centrally-held opex allocations and centrally-held P&E attributions. Includes consolidated Sunrise results for the period post-acquisition
(2) Sunrise Broadband and Postpaid Mobile net adds based on Sunrise definition

VODAFONE ZIGGO: FMC IS DELIVERING

Exceeded guidance with 6% FY EBITDA growth

2020 KEY RESULTS(1)

(39k)
CUSTOMER NET ADDS

+273k
POSTPAID MOBILE NET ADDS(2)

+4%
CUSTOMER ARPU GROWTH

+2.0%
REVENUE

+5.7%
ADJUSTED EBITDA

$1.2bn
OFCF (pre-spectrum)

KEY DRIVERS OF PERFORMANCE

1 MAINTAINING NETWORK & PRODUCT SUPERIORITY

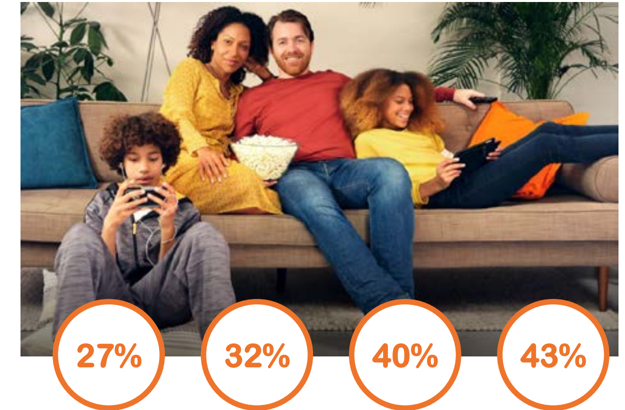
- 1Gbps speeds in over 3 million homes and footprint to double in 2021
- Enhanced broadband offerings through SmartWiFi solution
- First to offer nationwide 5G in 2020
- 4K EOS STB in 15% of video base, Horizon 4 software update for all legacy boxes

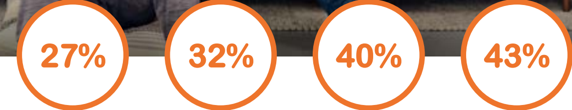
2 LEVERAGING CONVERGENCE TO DRIVE GROWTH

- 7th consecutive quarter of revenue growth
- Record 273k postpaid adds in 2020
- Unique content positioning and “more for more” strategy
- 4% Customer ARPU growth in 2020

3 SYNERGY TARGET ACHIEVED AHEAD OF PLAN

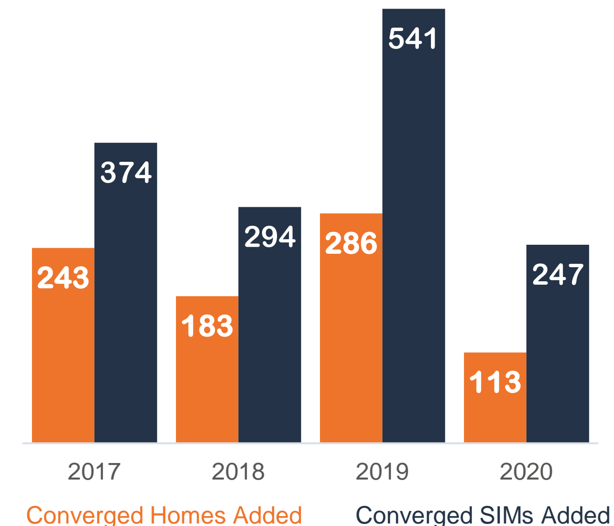
- €214m run rate synergies delivered vs targeted €210m by end 2021
- Continued Costs to Capture in 2021 ahead of IT systems integration
- Digital investments continue in 2021, migrating towards a fully digital operating model





LEVERAGING CONVERGENCE

Household FMC penetration



(1) Revenue, Adjusted EBITDA and OFCF growth rates presented on a rebased basis as applicable.
(2) Postpaid adds according to VodafoneZiggo definition including B2B

TELENET: GROWTH IN CORE OPERATIONS

Strong performance in broadband and all 2020 guidance metrics achieved

2020 KEY RESULTS(1)

(15k)
CUSTOMER NET ADDS

1.3%
CUSTOMER ARPU GROWTH

+70k
POSTPAID MOBILE NET ADDS

(2.0%)
REVENUE

0.2%
ADJUSTED EBITDA

$884m
ATTRIBUTED OFCF (2)

KEY DRIVERS OF PERFORMANCE

1 POSITIVE COMMERCIAL MOMENTUM AND FMC GROWTH

- Quad play FMC subscriber base to 642K, +17% vs 2019
- FMC penetration now over 46% powered by WIGO offers
- 11,000 broadband adds; best quarterly performance since Q4 ’15
- 1% price rise implemented in October 2020

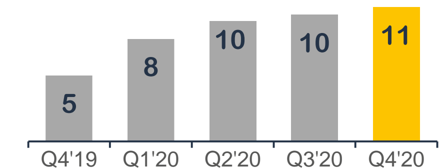
2 DRIVING INNOVATION

- Average BB speed of 212 Mbps, 40% of base >300Mbps
- 4G+ Mobile download speed leadership in market
- Deepening customer centric experience through “digital first” approach and radical simplification

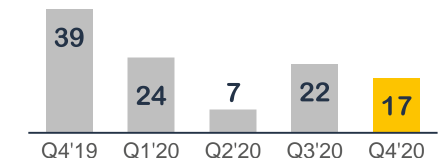
3 LOCAL 2020 IFRS GUIDANCE ACHIEVED(3)

- All FY guidance metrics achieved, confirming resilience of business
- Rebased Adjusted EBITDA returns to growth at 1-2% in 2021
- On track to deliver on lower end of 2018-2021 OFCF guidance
- Gross dividend of €1.375 per share proposed to April 2021 AGM per €2.75 dividend floor

FIXED BROADBAND GROWTH (000’s)



POSTPAID MOBILE ADDS (000’s)



(1) Revenue, Adj EBITDA and OFCF growth rates presented on a rebased basis as applicable. OFCF includes both centrally-held opex allocations and centrally-held P&E attributions. See the Appendix for definitions and non-GAAP reconciliations, where applicable
(2) Includes attribution of centrally-held P&E of $15m
(3) All guidance metrics mentioned based on local IFRS, growth rates presented on a rebased basis

FY 2020 ADJUSTED ATTRIBUTED FCF

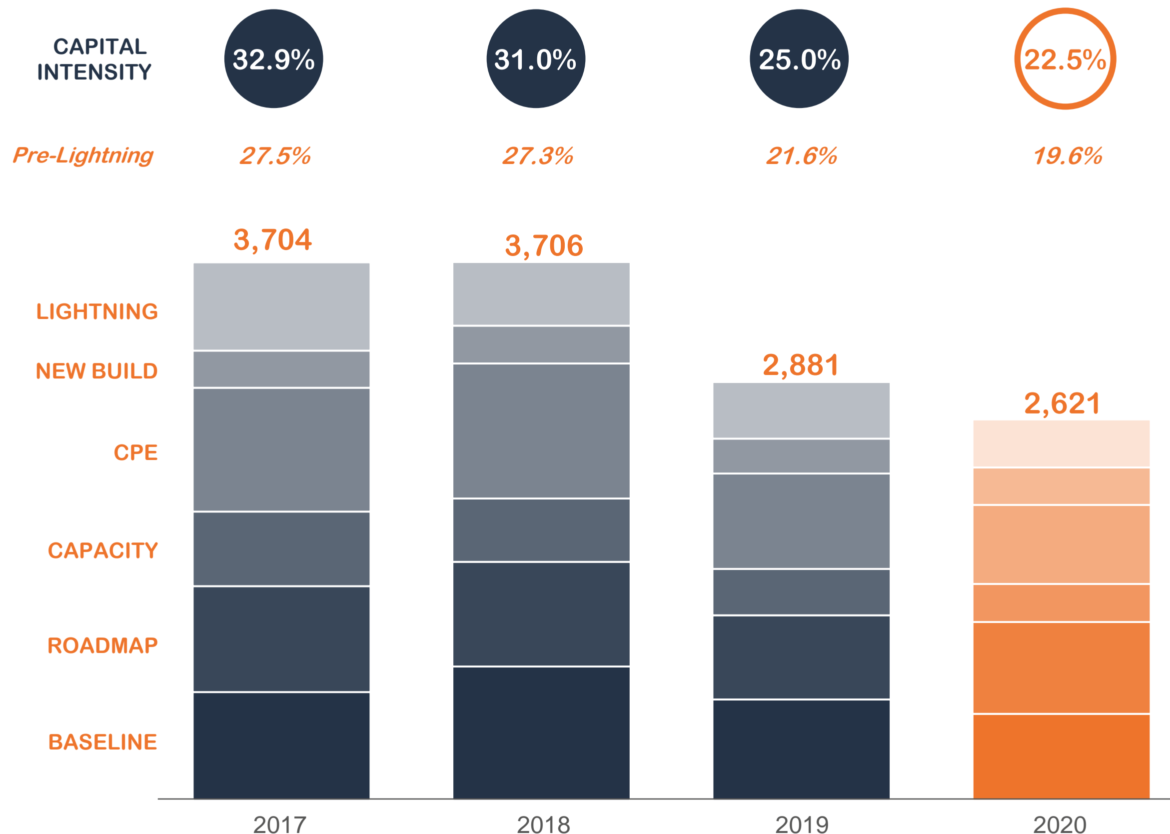
All OpCos remain substantially FCF positive despite COVID-19

$m	U.K. & Ireland	Belgium	Switzerland	Poland / Slovakia	Central [2]	Liberty Global	50-50 Dutch JV [3,4]
ADJUSTED EBITDA [1]	$2,672	$1,413	$694	$216	$(99)	$4,896	$2,142
P&E pre-lightning P&E [5]	(1,237)	(529)	(348)	(129)	(123)	(2,366)	(919)
OFCF pre-lightning P&E	$1,435	$884	$346	$87	$(222)	$2,530	$1,223
NET INTEREST	(746)	(218)	(123)	(57)	23	(1,121)	(477)
CASH TAX	(5)	(130)	(43)	(22)	(48)	(248)	-
VODAFONE ZIGGO JV (DIVIDEND & INTEREST)	-	-	-	-	299	299	-
	$684	$536	$180	$8	$52	$1,460	$740
WORKING CAPITAL [6]	599	(64)	(29)	17	(584)	(61)	(11)
ADJ ATTRIBUTED FCF pre-lightning P&E	$1,283	$472	$151	$25	($532)	$1,399	$735
LIGHTNING P&E [7]	(329)					(329)	
ADJ ATTRIBUTED FCF	$954					$1,070	

(1) Based on our updated definition of segment Adjusted EBITDA which, effective from Q4 2019, now includes Centrally allocated opex. For information on centrally-held operating cost allocations, see the appendix
(2) Includes intersegment eliminations
(3) Represents 100% of the non-consolidated Dutch JV
(4) Adjusted EBITDA for the Dutch JV as shown in the table above includes $130m of FSA charges from Liberty Global with the corresponding amount recognized as revenue within our Central segment
(5) Includes Centrally attributed P&E Additions. For information on our centrally-held P&E attributions, see the appendix included in our Q4 2020 Liberty Global earnings release. 50-50 Dutch JV P&E excludes 5G spectrum
(6) Includes working capital, operational finance (vendor finance) and restructuring. 50-50 Dutch JV figure excludes the interest paid on loans to Liberty Global
(7) Lightning Construction P&E includes construction P&E only. Excludes Customer Premises Equipment

CAPITAL INTENSITY FALLS TO 22.5%

19.6% capital intensity ex-Lightning



2020 SPEND DECLINES	CHANGE VS PRIOR YEAR
TOTAL NEW BUILD Lightning build of 426k (vs. 505k in 2019), CPP continues to trend down	-7%
CPE Pace of next-gen set-top boxes and routers continued, albeit at a slower pace from lower RGU volumes	-17%
CAPACITY Savings achieved from UKIE, BE and CH as capacity upgrades for 1Gbps rollouts are largely completed	-18%
ROADMAP Higher spend in the UK and BE on Mobile and IT roadmaps	+9%
BASELINE Major platform investment spend down with focus on deployment	-14%

CENTRAL UPDATE

Cost base managed in line with service agreements

$m	2019	2020
Total Operating Costs[1]	($601)	($576)
Central Revenue[2,3]	$405	$394
Opex allocation	$114	$82
Total Central Adj EBITDA[3]	($82)	($100)
Central P&E	($380)	($341)
Reported Central OFCF	($462)	($441)
Attributed central P+E	$227	$217
OFCF post-attribution	($235)	($224)

- Includes both T&I (core & partner markets) and Corporate spend
- TSA revenue from partner markets offset 100% of related costs
- Structures in place to flex cost base in line with TSA expiration
- T&I Opex allocations already reflected within OpCo Segment Adj EBITDA
- 2019 on a pro forma basis; 2020 as reported
- Central Capex to fulfil T&I services (both core- and partner markets)
- Allocation of Central T&I Capex to UKIE, CH, BE & PLSK
- Net Central OFCF post all T&I allocations. Typical corporate activities of management, finance, legal, corporate affairs, HR

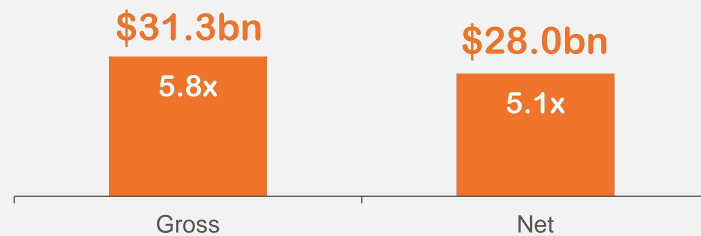
(1) Includes COGS for low-margin CPE
(2) Includes low-margin CPE sales to the Dutch JV
(3) Adjusted in 2019 with a Pro Forma $89m revenue addition reflecting the net cash flows that we would have received from transitional services agreements if the sale of the Discontinued Operations had occurred on January 1, 2019

CAPITAL ALLOCATION

Q4 FULL COMPANY LIQUIDITY (1)

Q4 FULL COMPANY LEVERAGE (3, 4)

(LTM basis, PF for Sunrise)



WACD	4.2%
Average tenor	>7 years

	Existing FMC Champions		New / Pending FMC Champions	
Q4'20	BE	VZ	UPC (incl. Sunrise)	VM/O2
Leverage(5)	4.40x	5.49x	4.65x	5x
WACD	3.4%	4.3%	4.0%	4.4%
Av. Life	~7.5 years	~8 years	~8 years	~8 years

(1) Liquidity refers to our consolidated cash and cash equivalents, investments held under separately managed accounts (SMAs), plus the maximum undrawn commitments under our subsidiaries' borrowing facilities without regard to covenant compliance calculations.
(2) Debt balances presented on swapped basis, taking into account derivative positions
(3) Full Company includes the debt and unused borrowing capacity of the Virgin Media entities classified as held for sale at December 31, 2020. The cash of Virgin Media is not classified as held for sale and will be retained by Liberty Global.
(4) BE reflects total net leverage on a US GAAP basis. VZ leverage reflects Total Net Leverage per the VodafoneZiggo fixed income report, on a covenant basis, including Vendor Financing and not reflecting the exclusion of any credit facilities. UPC credit pool including Sunrise on a covenant basis (full EBITDA contribution from Sunrise consistent with the inclusion of the Sunrise related debt), including Vendor Financing and not reflecting the exclusion of any credit facilities. VM/O2 reflect target total leverage at completion.

EXECUTIVE SUMMARY

FINANCIAL RESULTS

APPENDIX

REBASE INFORMATION

Rebase growth percentages, which are non-GAAP measures, are presented as a basis for assessing growth rates on a comparable basis. For purposes of calculating rebased growth rates on a comparable basis for all businesses that we owned during 2020, we have adjusted our historical revenue, Adjusted EBITDA and OFCF for the three months and year ended December 31, 2019 to (i) include the pre-acquisition revenue, Adjusted EBITDA and P&E additions of entities acquired during 2020 and 2019 in our rebased amounts for the three months and year ended December 31, 2019 to the same extent that the revenue, Adjusted EBITDA and P&E additions of these entities are included in our results for the three months and year ended December 31, 2020, (ii) exclude the revenue, Adjusted EBITDA and P&E additions in our rebased amounts for the three months and year ended December 31, 2019 for entities disposed of during 2020, (iii) 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, 2020 and (iv) reflect the translation of our rebased amounts for the three months and year ended December 31, 2019 at the applicable average foreign currency exchange rates that were used to translate our results for the three months and year ended December 31, 2020. We have reflected the revenue, Adjusted EBITDA and P&E additions of these acquired entities in our 2019 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, Adjusted EBITDA 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. In addition, the rebased growth percentages are not necessarily indicative of the revenue, Adjusted EBITDA 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, Adjusted EBITDA and OFCF that will occur in the future. Investors should view rebased growth as a supplement to, and not a substitute for, U.S. GAAP measures of performance included in our consolidated statements of operations.

The following table provides adjustments made to the 2019 amounts to derive our rebased growth rates:

	Three months ended December 31, 2019			Year ended December 31, 2019		
	Revenue	Adjusted EBITDA	OFCF	Revenue	Adjusted EBITDA	OFCF
	in millions					
Acquisitions	$ 285.3	$ 99.9	$ 32.7	$ 340.5	$ 100.8	$ 33.6
Dispositions[i]	(0.5)	(11.7)	(11.2)	77.9	53.8	55.4
Foreign Currency	175.7	74.7	27.3	197.2	82.6	30.5
Total increase	$ 460.5	$ 162.9	$ 48.8	$ 615.6	$ 237.2	$ 119.5

(i) Relates primarily to rebase adjustments for 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 2020 and 2019 periods for those services that are deemed to be temporary in nature.

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 EBITDA: Adjusted EBITDA is the primary measure used by our chief operating decision maker to evaluate segment operating performance and is also a key factor that is used by our internal decision makers to (i) determine how to allocate resources to segments and (ii) evaluate the effectiveness of our management for purposes of annual and other incentive compensation plans. As we use the term, Adjusted EBITDA is defined as earnings (loss) from continuing operations before net income tax benefit (expense), other non-operating income or expenses, net share of results of affiliates, net gains (losses) on debt extinguishment, net realized and unrealized gains (losses) due to changes in fair value of certain investments and debt, net foreign currency transaction gains (losses), net gains (losses) on derivative instruments, net interest expense, depreciation and amortization, share-based compensation, provisions and provision releases related to significant litigation and impairment, restructuring and other operating items. Other operating items include (a) gains and losses on the disposition of long-lived assets, (b) third-party costs directly associated with successful and unsuccessful acquisitions and dispositions, including legal, advisory and due diligence fees, as applicable, and (c) other acquisition-related items, such as gains and losses on the settlement of contingent consideration. Our internal decision makers believe Adjusted EBITDA 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 consolidated Adjusted EBITDA measure, which is a non-GAAP 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. Consolidated Adjusted EBITDA should be viewed as a measure of operating performance that is a supplement to, and not a substitute for U.S. GAAP measures of income included in our consolidated statements of operations.

Adjusted EBITDA margin: Adjusted EBITDA margin is a non-GAAP metric calculated by dividing Adjusted EBITDA by total revenue for the applicable period.

Adjusted Free Cash Flow (FCF): Net cash provided by our operating activities, plus (i) cash payments or receipts 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, as applicable. We believe that our presentation of Adjusted Free Cash Flow, which is a non-GAAP measure, 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.

ARPU: Average Revenue Per Unit is the average monthly subscription revenue per average cable customer relationship or mobile subscriber, as applicable. ARPU per average fixed-line 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, which is a non-GAAP measure, we adjust the prior-year subscription revenue, fixed-line customer relationships, mobile subscribers and RGUs, as applicable, to reflect acquisitions, dispositions and FX on a comparable basis with the current year, consistent with how we calculate our rebased growth for revenue and Adjusted EBITDA.

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 or through a partner 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.

GLOSSARY

B2B: Business-to-Business.

Costs to capture (CTC): Costs to capture primarily include incremental, third-party operating and capital related costs that are directly associated with integration activities and certain restructuring activities necessary to combine the operations of a business being acquired with those of the acquiring business (including the formation of joint ventures), or are directly incidental to the acquisition. Costs to capture may also include certain integration related restructuring expenses that are not included within Adjusted EBITDA or OFCF. Generally, costs to capture are incurred over the same period we expect to derive synergies.

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.

Leverage and Liquidity: Our debt and net debt ratios, which are non-GAAP metrics, are defined as total debt and net debt, respectively, divided by Adjusted EBITDA for the last twelve months (LTM Adjusted EBITDA). Net debt is defined as total debt less cash and cash equivalents and investments under separately managed accounts. Consistent with how we calculate our leverage ratios under our debt agreements, these ratios are presented on a Full Company basis that includes the debt and Adjusted EBITDA of the U.K. JV entities that are classified as held for sale on our September 30, 2020 condensed consolidated balance sheet. 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.

Liquidity refers to cash and cash equivalents and investments held under separately managed accounts plus the maximum undrawn commitments under subsidiary borrowing facilities for the Full Company, without regard to covenant compliance calculations or other conditions precedent to borrowing.

The term "Full Company" includes certain amounts related to the U.K. JV Entities, which are presented as held for sale in our September 30, 2020 condensed consolidated balance sheet. For purposes of presenting certain debt and liquidity metrics consistent with how we calculate our leverage ratios under our debt agreements, we have included the debt and finance lease obligations of the U.K. JV Entities in our Full Company metrics.

Lightning premises: Includes homes, residential multiple dwelling units and commercial premises that potentially could subscribe to our residential or SOHO services, which have been connected to our networks as a part of our Project Lightning network extension program in the U.K. and Ireland. Project Lightning infill build relates to construction in areas adjacent to our existing network.

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.

GLOSSARY

MVNO: Mobile Virtual Network Operator.

NPS: Net Promoter Score.

OFCF: As used herein, Operating Free Cash Flow or "OFCF", which is a non-GAAP measure, represents Adjusted EBITDA 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.

OFCF margin: OFCF margin is a non-GAAP metric calculated by dividing OFCF by total revenue for the applicable period.

PIA: Physical Infrastructure Access

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.

Rental ARPU: subscription ARPU less out-of-bundle telephony usage and pay-per-view

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.

RECONCILIATIONS

REBASE ADJUSTMENTS

Rebase growth percentages, which are non-GAAP measures, are presented as a basis for assessing growth rates on a comparable basis. For further details on adjustments made to arrive at our rebase growth rates for the periods below, refer to our previously issued earnings releases which can be found on our website at www.libertyglobal.com, as well as the *Rebase Information* section included earlier in this presentation.

	Consolidated Liberty Global						
	Revenue					Adjusted EBITDA	OFCF
	Quarter ended				Year Ended	Year Ended	
	March 31, 2019	June 30, 2019	September 31, 2019	December 31, 2019	December 31, 2019	December 31, 2019	December 31, 2019
	in millions						
Acquisitions...............	$ 31.3	$ 23.9	$ -	$ 285.3	$ 340.5	$ 100.8	$ 33.6
Dispositions(i).............	35.5	37.0	5.9	(0.5)	77.9	53.8	55.4
Foreign Currency........	(50.9)	(67.1)	147.2	175.7	197.2	82.6	30.5
Total increase..........	$ 15.9	$ (6.2)	$ 153.1	$ 460.5	$ 615.6	$ 237.2	$ 119.5

RECONCILIATIONS

REBASE ADJUSTMENTS (CONTINUED)

	UKIE	BE	CH	VZ
	Revenue			
	Year ended December 31, 2019			
	in millions			
Acquisitions...............	$ -	$ 55.2	$ 285.3	$ -
Dispositions(i).............	-	(7.6)	-	-
Foreign Currency........	45.0	58.9	103.0	70.0
Total increase..........	$ 45.0	$ 106.5	$ 388.3	$ 70.0

	UKIE	BE	CH	VZ
	OFCF			
	Year ended December 31, 2019			
	in millions			
Acquisitions...............	$ -	$ 0.9	$ 32.7	$ -
Dispositions(i).............	(3.4)	(1.9)	-	-
Foreign Currency........	7.0	14.5	20.0	22.0
Total increase..........	$ 3.6	$ 13.5	$ 52.7	$ 22.0

	UKIE		CH		BE	VZ
	Adjusted EBITDA					
	Quarter ended	Year Ended	Quarter ended	Year Ended	Year Ended	
	December 31, 2019					
	in millions					
Acquisitions...............	$ -	$ -	$ 99.9	$ 99.9	$ 0.9	$ -
Dispositions(i).............	-	(3.4)	-	-	(3.5)	-
Foreign Currency........	21.5	14.5	24.6	47.0	26.4	38.0
Total increase..........	$ 21.5	$ 11.1	$ 124.5	$ 146.9	$ 23.8	$ 38.0

RECONCILIATIONS

ADJUSTED EBITDA

The following tables provide a reconciliation of our loss from continuing operations to Adjusted EBITDA for the indicated periods:

	Year Ended	
	December 31, 2019	December 31, 2020
	in millions	
Loss from continuing operations	$ (1,409.0)	$ (1,466.7)
Income tax expense (benefit)	253.0	(256.9)
Other income, net	(114.4)	(76.1)
Share of results of affiliates, net	198.5	245.3
Losses on debt extinguishment, net	216.7	233.2
Realized and unrealized gains due to changes in fair values of certain investments and debt, net	(72.0)	(45.2)
Foreign currency transaction losses, net	94.8	1,416.3
Realized and unrealized losses on derivative instruments, net	192.0	879.3
Interest expense	1,385.9	1,188.5
Operating income	745.5	2,117.7
Impairment, restructuring and other operating items, net	156.0	98.6
Depreciation and amortization	3,652.2	2,331.3
Share-based compensation expense	305.8	348.0
Adjusted EBITDA	$ 4,859.5	$ 4,895.6

RECONCILIATIONS

ADJUSTED FCF

The following table provides a reconciliation of our net cash provided by operating activities to Adjusted Free Cash Flow for the indicated periods:

	Year ended December 31, 2020	Year ended December 31, 2019
	in millions	
Continuing operations:		
Net cash provided by operating activities	$ 4,185.8	$ 3,714.1
Cash payments for direct acquisition and disposition costs (i)	34.7	(13.5)
Expenses financed by an intermediary (ii)	2,770.0	2,171.4
Capital expenditures, net	(1,350.2)	(1,243.1)
Principal payments on amounts financed by vendors and intermediaries	(4,506.0)	(3,934.7)
Principal payments on certain finance leases	(64.5)	(62.9)
Adjusted FCF	$ 1,069.8	$ 631.3
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)		$ 770.1

RECONCILIATIONS

ADJUSTED FCF (CONT.)

(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. These estimated payments are calculated based on Hungary, Romania and the Czech Republic's pro rata share of UPC Holding's Adjusted EBITDA and UPC Holding's aggregate interest and derivative payments. 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 adjustment for the year ended December 31, 2019 includes $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.

RECONCILIATIONS

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 Adjusted EBITDA of our operating segments and is reflected in our reported U.S. GAAP segment disclosures. The following table provides a summary of the impact on the Adjusted EBITDA of our consolidated reportable segments and Central and Corporate that resulted from the Centrally-held Operating Cost Allocations.

	Year ended December 31,	
	2020	2019
	in millions	
Increase (decrease) to Adjusted EBITDA:		
U.K./Ireland	$ (51.2)	$ (66.6)
Switzerland	(20.1)	(33.0)
CEE	(10.7)	(14.7)
Central and Corporate	82.0	114.3
Total Liberty Global	$ —	$ —

RECONCILIATIONS

CENTRALLY-HELD P&E ATTRIBUTIONS / ATTRIBUTED OFCF

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 Adjusted EBITDA 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.

A reconciliation of our Adjusted EBITDA to attributed OFCF, including Centrally-held Property and Equipment Attributions, consistent with our internal management reporting approach, of (i) our operating segments and (ii) consolidated continuing operations is presented in the following table. 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					
	U.K. & Ireland	Belgium	Switzerland	CEE	Central & Corporate	Total
	in millions					
Adjusted EBITDA	$ 2,800.5	$ 1,386.1	$ 627.9	$ 215.0	$ (170.0)	$ 4,859.5
Property & equipment additions	(1,578.0)	(537.2)	(277.9)	(107.0)	(380.4)	(2,880.5)
Centrally-held P&E Attribution	(136.5)	(11.3)	(52.1)	(26.9)	226.8	-
Attributed OFCF (including attribution of Centrally-held P&E)	1,086.0	837.6	297.9	81.1	(323.6)	1,979.0
Lightning P&E	390.0	-	-	-	-	390.0
Pre-Lightning Attributed OFCF (including attribution of Centrally-held P&E)	$ 1,476.0	$ 837.6	$ 297.9	$ 81.1	$ (323.6)	$ 2,369.0

	Year ended December 31, 2020					
	U.K. & Ireland	Belgium	Switzerland	CEE	Central & Corporate	Total
	in millions					
Adjusted EBITDA	$ 2,672.4	$ 1,413.4	$ 693.8	$ 215.6	$ (99.6)	$ 4,895.6
Property & equipment additions	(1,432.7)	(513.6)	(302.8)	(105.5)	(340.7)	(2,695.3)
Centrally-held P&E Attribution	(133.0)	(14.5)	(45.5)	(24.3)	217.3	-
Attributed OFCF (including attribution of Centrally-held P&E)	1,106.7	885.3	345.5	85.8	(223.0)	2,200.3
Lightning P&E	329.0	-	-	-	-	329.0
Pre-Lightning Attributed OFCF (including attribution of Centrally-held P&E)	$ 1,435.7	$ 885.3	$ 345.5	$ 85.8	$ (223.0)	$ 2,529.3

RECONCILIATIONS

SUPPLEMENTAL ADJUSTED ATTRIBUTED FREE CASH FLOW

We define adjusted free cash flow as 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.

The following table provides a reconciliation of our net cash provided by operating activities to Adjusted Free Cash Flow for the indicated period. In addition, in order to provide information regarding our Adjusted Attributed Free Cash Flow, which is used for internal management reporting and capital allocation purposes and is consistent with the way in which our chief operating decision maker evaluates our operating segments, we have provided a reconciliation of our Adjusted Free Cash Flow to our Adjusted Attributed Free Cash Flow, which incorporates adjustments related to (i) interest on an intercompany loan, (ii) the allocation of interest and fees within the UPC Holding borrowing group, (iii) the Centrally-held Operating Cost Allocation and (iv) the Centrally-held Property and Equipment Attribution, each as further described below. We believe that our presentation of Adjusted Free Cash Flow and Adjusted Attributed Free Cash Flow, each of which is a non-GAAP measure, provides useful information to our investors because these measures can be used to (a) gauge our ability to service debt and fund new investment opportunities and (b) in the case of our Adjusted Attributed Free Cash Flow, provide additional pro forma information for our operating segments to show what the adjusted free cash flow of our operating segments might look like were they to operate on a stand alone basis. Adjusted Free Cash Flow and Adjusted Attributed 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 these amounts. Investors should view Adjusted Free Cash Flow and Adjusted Attributed Free Cash Flow as supplements to, and not substitutes for, U.S. GAAP measures of liquidity included in our condensed consolidated statements of cash flows.

	Year ended December 31, 2020					
	U.K./Ireland	Belgium	Switzerland	Continuing CEE	Central and Corporate (a)	Total Liberty Global
			in millions			
Adjusted free cash flow:						
Net cash provided (used) by operating activities	$ 2,774.8	$ 1,047.8	$ 601.9	$ 212.5	$ (451.2)	$ 4,185.8
Cash payments for direct acquisition and disposition costs	-	3.7	6.7	(0.2)	24.5	34.7
Expenses financed by an intermediary	2,063.8	409.4	124.0	17.8	155.0	2,770.0
Capital expenditures	(558.0)	(431.9)	(164.8)	(70.5)	(125.0)	(1,350.2)
Principal payments on amounts financed by vendors and intermediaries	(2,817.0)	(494.4)	(231.0)	(43.0)	(920.6)	(4,506.0)
Principal payments on certain capital leases	(5.8)	(48.1)	(3.6)	(1.1)	(5.9)	(64.5)
Adjusted free cash flow	1,457.8	486.5	333.2	115.5	(1,323.2)	1,069.8
Adjustments to attributed adjusted free cash flow:						
Interest on intercompany loan (b)	(319.9)	-	-	-	319.9	-
Interest allocation (c)	-	-	(116.2)	(55.1)	171.3	-
Centrally-held Operating Cost Allocations (d)	(51.2)	-	(20.2)	(10.7)	82.1	-
Centrally-held Property and Equipment Attributions (e)	(133.0)	(14.5)	(45.5)	(24.3)	217.3	-
Attributed adjusted free cash flow	$ 953.7	$ 472.0	$ 151.3	$ 25.4	$ (532.6)	$ 1,069.8

RECONCILIATIONS

SUPPLEMENTAL ADJUSTED ATTRIBUTED FREE CASH FLOW (CONT.)

a. Includes intersegment eliminations.

b. Represents interest on an intercompany loan that we eliminate for purposes of this presentation as intercompany interest income/expense does not impact our leverage calculations in our consolidated results or our subsidiary borrowing groups.

c. Represents the third-party interest, fees and related derivative payments made by UPC Holding (a parent entity included in Central and Corporate) in relation to its operating entities during the applicable period. This interest is allocated to each of the respective operating entities in the UPC Holding group based on our estimates of the composition of the underlying debt and swap portfolio and applicable interest rates within each country.

d. 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 Adjusted EBITDA of our operating segments. For purposes of our Attributed Adjusted Free Cash Flow presentation and consistent with our internal management reporting, we assume the allocations to our operating segments are cash settled in the period they are incurred. As a result, any working capital or other free cash flow benefit or detriment related to the actual timing of payments are reported within Central and Corporate.

e. Central and Corporate incurs certain capital costs 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. 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 used for internal management reporting. 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. 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. For purposes of our Attributed Adjusted Free Cash Flow presentation and consistent with our internal management reporting, we assume the attributions to our operating segments are cash settled in the period they are incurred. As a result, any working capital or other free cash flow benefit or detriment related to the actual timing of payments are reported within Central and Corporate.

RECONCILIATIONS

VODAFONEZIGGO JV ADJUSTED FREE CASH FLOW (JV FCF)

JV Adjusted FCF is defined as net cash provided by operating activities, plus (i) expenses financed by an intermediary and (ii) interest payments on certain Shareholder loans, less (a) capital expenditures, (b) principal payments on amounts financed by vendors and intermediaries and (c) principal payments on finance leases. We believe that the presentation of Adjusted Free Cash Flow provides useful information to our investors because this measure can be used to gauge VodafoneZiggo's ability to service debt, distribute cash to parent entities and fund new investment opportunities. JV FCF, which is a non-GAAP measure, should not be understood to represent VodafoneZiggo's ability to fund discretionary amounts, as it has various mandatory and contractual obligations, including debt repayments, that are not deducted to arrive at this amount. Investors should view free cash flow as a supplement to, and not a substitute for, GAAP measures of liquidity included in VodafoneZiggo's condensed consolidated statements of cash flows within its bond report. For purposes of its standalone reporting obligations, VodafoneZiggo prepares its consolidated financial statements in accordance with accounting principles generally accepted in the U.S. (GAAP).

Adjusted Free Cash Flow is a non-GAAP measure as contemplated by the U.S. Securities and Exchange Commission. A reconciliation of JV FCF for the year ended December 31, 2020 is provided below.

	Year ended December 31, 2020 in millions
Net cash provided by operating activities	$ 1,578.0
Expenses financed by an intermediary	785.8
Interest payments on shareholder loans	97.4
Capital expenditures, net	(324.8)
Principal payments on amounts financed by vendors and intermediaries	(1,389.7)
Principal payments on finance leases	(11.6)
Adjusted FCF	$ 735.1