

The UPC Holding Group

Combined Financial Statements
December 31, 2021

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PART I

FORWARD-LOOKING STATEMENTS

Certain statements in this annual report constitute forward-looking statements. To the extent that statements in this annual report are not recitations of historical fact, such statements constitute forward-looking statements, which, by definition, involve risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements. In particular, statements under Item I. Business, Item IA. Risk Factors and Part II. Management's Discussion and Analysis of Financial Condition and Results of Operations may contain forward-looking statements, including statements regarding our business, product, foreign currency and finance strategies, our property and equipment additions, subscriber growth and retention rates, competitive, regulatory and economic factors, the timing and impacts of proposed transactions, the maturity of our markets, the potential impact of the coronavirus (COVID-19) on our company, the anticipated impacts of new legislation (or changes to existing rules and regulations), anticipated changes in our revenue, costs or growth rates, our liquidity, credit risks, foreign currency risks, interest rate risks, target leverage levels, debt covenants, our future projected contractual commitments and cash flows and other information and statements that are not historical fact. Where, in any forward-looking statement, we express an expectation or belief as to future results or events, such expectation or belief is expressed in good faith and believed to have a reasonable basis, but there can be no assurance that the expectation or belief will result or be achieved or accomplished. In evaluating these statements, you should consider the risks and uncertainties discussed under Item IA. Risk Factors, as well as the following list of some but not all of the factors that could cause actual results or events to differ materially from anticipated results or events:

- economic and business conditions and industry trends in the countries in which we operate;
- the competitive environment in the industries and in the countries in which we operate, including competitor responses
 to our products and services;
- fluctuations in currency exchange rates and interest rates;
- instability in global financial markets, including sovereign debt issues and related fiscal reforms;
- consumer disposable income and spending levels, including the availability and amount of individual consumer debt;
- changes in consumer television viewing and broadband usage preferences and habits;
- consumer acceptance of our existing service offerings, including our broadband internet, television, fixed-line
 telephony, mobile and business service offerings, and of new technology, programming alternatives and other products
 and services that we may offer in the future;
- our ability to manage rapid technological changes and the rate at which our current technology becomes obsolete;
- our ability to maintain or increase the number of subscriptions to our broadband internet, television, fixed-line telephony and mobile service offerings and our average revenue per household;
- our ability to provide satisfactory customer service, including support for new and evolving products and services;
- our ability to maintain or increase rates to our subscribers or to pass through increased costs to our subscribers;
- the impact of our future financial performance, or market conditions generally, on the availability, terms and deployment of capital;
- changes in, or failure or inability to comply with, government regulations and legislation in the countries in which we operate and adverse outcomes from regulatory proceedings;
- government intervention that requires opening our broadband distribution networks to competitors;
- our ability to obtain regulatory approval and satisfy other conditions necessary to close acquisitions and dispositions and the impact of conditions imposed by competition and other regulatory authorities in connection with acquisitions;
- our ability to successfully acquire new businesses and, if acquired, to integrate, realize anticipated efficiencies from and implement our business plan with respect to the businesses we have acquired or that we expect to acquire;
- changes in laws or treaties relating to taxation, or the interpretation thereof, in the countries in which we operate;
- changes in laws and government regulations that may impact the availability and cost of capital and the derivative instruments that hedge certain of our financial risks;
- the ability of suppliers and vendors (including our third-party wireless network providers under our mobile virtual network operator (MVNO) arrangements) to timely deliver quality products, equipment, software, services and access;

- the availability of attractive programming for our video services and the costs associated with such programming, including production costs, retransmission and copyright fees payable to public and private broadcasters;
- uncertainties inherent in the development and integration of new business lines and business strategies;
- our ability to adequately forecast and plan future network requirements;
- the availability of capital for the acquisition and/or development of telecommunications networks and services;
- the availability, cost and regulation of spectrum;
- problems we may discover post-closing with the operations, including the internal controls and financial reporting process, of businesses we acquire;
- successfully integrating in the time or within the budgets estimated for such integrations;
- operating costs, customer loss and business disruption, including maintaining relationships with employees, customers, suppliers or vendors may be greater than expected in connection with our acquisitions;
- our ability to realize the expected synergies from our acquisitions in the amounts anticipated or on the anticipated timelines;
- the leakage of sensitive customer data;
- the outcome of any pending or threatened litigation;
- the loss of key employees and the availability of qualified personnel;
- our capital structure and factors related to our debt arrangements;
- changes in the nature of key strategic relationships with partners and joint venturers; and
- events that are outside of our control, such as political unrest in international markets, terrorist attacks, malicious human acts, natural disasters, epidemics, pandemics (such as COVID-19) and other similar events, including the ongoing invasion of Ukraine by Russia.

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

BUSINESS

In the following text, the terms, "we", "our", "our company" and "us" refer to the UPC Holding Group, as defined and described below. Unless otherwise indicated, operational data, including subscriber statistics and product offerings, are as of December 31, 2021.

Introduction

UPC Holding B.V. (**UPC Holding**), UPC Slovakia Holding I B.V. (**UPC Slovakia**), UPC Poland Holding B.V. (**UPC Poland**) and and Liberty Global Finance II (UK) Limited (**LG Finance II**) are wholly-owned subsidiaries of Liberty Global plc (**Liberty Global**). The accompanying discussion includes the historical financial information of UPC Holding and its subsidiaries, UPC Slovakia and its subsidiaries (**Slovakia**), UPC Poland and its subsidiaries (**Poland**) and LG Finance II (collectively, the **UPC Holding Group**).

The UPC Holding Group is an international provider of broadband internet, video, fixed-line telephony and mobile communications services to residential customers and businesses in Europe. Our continuing operations comprise businesses that provide residential and business-to-business (**B2B**) communications services in Switzerland and Slovakia. In addition, we currently provide residential and B2B communications services in Poland. On September 22, 2021, we entered into an agreement to sell our operations in Poland. Closing of the transaction is expected to occur during the first half of 2022.

We design our services to enable our customers to access the digital world on their own terms and at their own pace. Offering "best in class" connectivity is at the core of our strategy. Today, our extensive broadband network enables us to deliver ultra-high-speed internet service across our markets, be it through fiber, cable or mobile technology. We are striving to extend our reach and reinforce our speed leadership. In most of our footprint, we offer converged fixed and mobile experiences in and out of the home and it is our ambition to further enhance this proposition and make it available to all our customers.

We deliver mobile services to our customers (i) in Switzerland as a mobile network operator, as well as a MVNO through third-party networks pursuant to a legacy contract that is being phased out as a result of the Sunrise Acquisition (as defined below) and (ii) in Poland as a MVNO.

Liberty Global is a world leader in converged broadband, video and mobile communications services. It delivers market-leading products through next-generation networks that connect retail and wholesale customers subscribing to over 85 million (at December 31, 2021) broadband internet, video, fixed-line telephony and mobile services across Europe. Liberty Global's businesses operate under some of the best-known consumer brands, including Virgin Media-O2 in the U.K., VodafoneZiggo in The Netherlands, Telenet in Belgium, Sunrise UPC in Switzerland, Virgin Media in Ireland and UPC in Eastern Europe. Liberty Global, through its global investment arm Liberty Global Ventures, has a portfolio of more than 75 companies and funds across content, technology and infrastructure, including strategic stakes in companies such as Plume Design, Inc., ITV plc, Lions Gate Entertainment Corp, Univision Holdings Inc., the Formula E racing series and several regional sports networks.

On November 11, 2020, we completed the acquisition of Sunrise Communications Group AG (**Sunrise**) through the settlement of an all cash public tender offer of the outstanding shares of Sunrise (the "**Sunrise Acquisition**"). In April 2021, we completed a statutory "squeeze-out" procedure, under applicable Swiss law, to acquire the remaining shares of Sunrise that were not acquired pursuant to the tender offer and, accordingly, now hold 100% of the share capital of Sunrise.

Our existing operations in Switzerland and Sunrise are collectively referred to as "**Sunrise UPC**". For more information, see note 5 to our combined financial statements included in Part II of this annual report.

Operating Data

The following table presents certain operating data of our combined entities as of December 31, 2021:

| | Con | Discontinued operation | | |
|---------------------------------------|----------------------------|------------------------|-----------|-----------|
| | Switzerland ⁽⁸⁾ | Slovakia | Total | Poland |
| FIXED | | | | |
| Footprint | | | | |
| Homes Passed ⁽¹⁾ | 2,484,400 | 632,900 | 3,117,300 | 3,703,400 |
| Fixed-Line Customer Relationships (2) | | | | |
| Fixed-line Customer Relationships | 1,476,900 | 188,700 | 1,665,600 | 1,569,400 |
| RGUs per Customer Relationship | 2.32 | 2.15 | 2.30 | 2.13 |
| Subscribers (RGUs) ⁽³⁾ | | | | |
| Internet ⁽⁴⁾ | 1,166,200 | 146,800 | 1,313,000 | 1,350,500 |
| Video ⁽⁵⁾ | 1,239,800 | 169,200 | 1,409,000 | 1,397,200 |
| Telephony ⁽⁶⁾ | 1,021,200 | 90,000 | 1,111,200 | 598,600 |
| Total RGUs | 3,427,200 | 406,000 | 3,833,200 | 3,346,300 |
| MOBILE | | | | |
| Mobile Subscribers (7) | | | | |
| Postpaid | 2,152,800 | _ | 2,152,800 | 121,300 |
| Prepaid | 457,500 | | 457,500 | |
| Total Mobile subscribers | 2,610,300 | | 2,610,300 | 121,300 |

- (1) Homes Passed are 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. Due to the fact that we do not own the partner networks (as defined below) used in Switzerland (see note 8 below), we do not report homes passed for Switzerland's partner networks.
- (2) Fixed-Line Customer Relationships are the number of customers who receive at least one of our internet, video or telephony services that we count as Revenue Generating Units (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.
- RGU is separately a Video Subscriber, Internet Subscriber or Telephony Subscriber (each as defined and described below). A home, residential multiple dwelling unit or commercial unit may contain one or more RGUs. For example, if a residential customer subscribed to our video service, fixed-line telephony service and broadband internet service, the customer would constitute three RGUs. Total RGUs is the sum of Video, Internet and Telephony Subscribers. RGUs generally are counted on a unique premises basis such that a given premise 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 internet, video 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.
- (4) Internet Subscribers are homes, residential multiple dwelling units or commercial units that receive internet services over our networks, or that we service through a partner network (as defined below). In Switzerland, we offer a 10 Mbps

internet service to our Video Subscribers without an incremental recurring fee. Our Internet Subscribers in Switzerland include 47,300 subscribers who have requested and received this service.

- (5) Video Subscribers are homes, residential multiple dwelling units or commercial units that receive our video services over our broadband network or through a partner network. We have approximately 31,400 "lifeline" customers that are counted on a per connection basis, representing the least expensive regulated tier of video cable service, with only a few channels.
- (6) Telephony Subscribers are homes, residential multiple dwelling units or commercial units that receive voice services over our networks, or that we service through a partner network. Telephony Subscribers exclude mobile telephony subscribers. In Switzerland, we offer a basic phone service to our Video Subscribers without an incremental recurring fee. Our Telephony Subscribers in Switzerland include 215,400 subscribers who have requested and received this service.
- Our Mobile Subscriber count represents the number of active subscriber identification module (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 subscriber count after periods of inactivity ranging from 30 to 90 days, based on industry standards within the respective country. In Switzerland, our mobile subscribers receive mobile services pursuant to prepaid contracts, which amounted to 457,500 prepaid subscribers as of December 31, 2021.
- (8) Pursuant to service agreements, Switzerland offers broadband internet, video and telephony services over networks owned by third-party cable operators ("partner networks"). A partner network RGU is only recognized if there is a direct billing relationship with the customer. At December 31, 2021, Switzerland's partner networks accounted for 113,100 Fixed-Line Customer Relationships and 291,800 RGUs, which include 106,800 Internet Subscribers, 102,500 Video Subscribers and 82,500 Telephony Subscribers. Subscribers to our video services provided over partner networks largely receive video services from the partner networks as opposed to our operations. Due to the fact that we do not own these partner networks, we do not include the 464,900 homes passed by Switzerland's partner networks at December 31, 2021. In addition, with the completion of the Sunrise Acquisition, we now service homes through Sunrise's existing agreements with Swisscom AG (Swisscom), Swiss Fibre Net and local utilities, which are not included in Switzerland's homes passed count. Including these arrangements, our operations in Switzerland have the ability to offer fixed services to a national footprint.

Additional General Notes to Table:

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

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

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

Products and Services

Our main products and services are WiFi and internet services, video, mobile, and telephony services.

Intelligent WiFi and Internet Services

Connectivity is a critical building block for vibrant communities. As highlighted by the current COVID-19 pandemic, all aspects of society, including families, businesses, education and healthcare, to name a few, rely heavily on connectivity and the digital services that depend on it. To meet our customers' expectations of seamless connectivity, we are developing a fully digital, cloud based connectivity ecosystem that we call "ONE Connect", built on top of our fiber-rich fixed broadband network and recently expanded mobile network. The ONE Connect is orchestrated by a fully cloud-based digital journey, enabling fast and flexible introduction of new hardware and services, as well as cloud to cloud open API integration, simplifying the on-boarding of new services and devices. The devices used within our ONE Connect ecosystem are connected and protected through our security gateway and VPN, both at home and on the go. At home, our customers can benefit from the gigabit speeds enabled by our "Connect Box" (as described below), as well as "Intelligent WiFi", which has optimization functionalities, such as the ability to adapt to the number of people and devices online at any given time in order to improve and extend wireless connectivity reach and speeds. We have completed the rollout of our award-winning Intelligent WiFi across all our markets. In addition, we introduced our first "Smart Home" bundles in select markets, enabling those customers to take their smart home ambitions to the next level, including enhanced entertainment, home automation and home security. Finally, our "Connect App" is the digital touchpoint that allows customers to access and manage all of our services.

Our Connect Box is our next generation intelligent WiFi and telephony gateway that enables us to maximize the impact of our ultrafast broadband networks by providing reliable wireless connectivity anywhere in the home. This gateway can be selfinstalled and allows customers to customize their home WiFi service. Our latest versions of the gigabit Connect Box are based on DOCSIS 3.1 technology and WiFi 6, providing even better in-home WiFi service. Our new DOCSIS 3.1 Connect Box runs our "One Firmware" stack, a middleware software system based on the Reference Design Kit for Broadband (RDK-B). RDK-B is an open source initiative with wide participation from operatiors, device manufacturers and silicon vendors that standardizes core functions used in broadband devices, set-top boxes and internet of things solutions. We have extended the One Firmware stack to support our ONE Connect ecosystem features, allowing us to build once and port to many. It is expected that we will roll-out One Firmware to the base of DOCSIS 3.0 legacy customer premises equipment during 2022. To support the adoption of fiber to the home, cabinet, building or node networks (fiber-to-the-home/-cabinet/-building/-node is referred to herein as "FTTx") access in both on-net and off-net scenarios, we plan to add XGS-PON (an updated standard for passive optical networks that supports higher-speed 10 Gbps symmetrical data transfers) and Ethernet-based Connect Boxes with WiFi 6, providing speeds up to 10 Gbps that run our One Firmware and support our ONE Connect ecosystem. Our Connect Box is available in all our markets, and as of December 31, 2021, approximately 1.5 million of our customers had a Connect Box. Robust wireless connectivity is increasingly important with our customers spending more and more time using bandwidthheavy services on multiple devices. We also offer our Connect App that, among other things, allows our customers to optimize their WiFi coverage and manage their connected devices. In addition, we provide intelligent WiFi mesh boosters, which increase speed, reliability and coverage by adapting to the environment at home.

Internet speed is of crucial importance to our customers, as they spend more time streaming video and other bandwidth-heavy services on multiple devices. Our extensive broadband network enables us to deliver ultra-high-speed internet service across our markets. Our residential subscribers access the internet via cable modems connected to their internet capable devices, or wirelessly via a WiFi gateway device. We offer multiple tiers of broadband internet service up to Gigabit speeds. The speed of service depends on the customer location and their service selected.

We offer value-added broadband services in certain of our markets for an incremental charge. These services include Intelligent WiFi features, security (e.g., anti-virus, anti-spyware, firewall and spam protection), Smart Home services, and online storage solutions and web spaces. Subscribers to our internet service pay a monthly fee based on the tier of service selected. In addition to the monthly fee, customers pay an activation service fee upon subscribing to an internet service. This one-time fee may be waived for promotional reasons. We determine pricing for each different tier of internet service through an analysis of speed, market conditions and other factors.

In all of our markets, we have deployed community WiFi via routers in the home (the **Community WiFi**), which provides secure access to the internet for our customers. Community WiFi is enabled by a cable modem WiFi access point (**WiFi modem**) in a Connect Box of our internet customers. The Community WiFi is created through the sharing of access to the public channel of our customers' home wireless routers. The public channel is a separate network from the secure private

network used by the customer within the home and is automatically enabled when the WiFi modem is installed. Public WiFi access points (covering train stations, hotels, bars, restaurants and other public places) are also available for no additional cost.

We continue to expand our Community WiFi service throughout our markets. In Switzerland and Poland, we are expanding our Community WiFi through access points covering public places. Our Community WiFi is branded as "Wi-Free" in most of our markets. Through an agreement with Comcast Corporation, our internet customers will also have access to millions of WiFi access points across various European countries for no additional cost.

Video Services

Our video service is, and continues to be, one of the foundations of our product offerings in our markets. Our cable operations offer multiple tiers of digital video programming and audio services, starting with a basic video service. Subscribers to our basic video service pay a fixed monthly fee and receive digital video channels (including a limited number of high definition (**HD**) and ultra-high definition 4K resolution (**4K**) channels) and several digital and analog radio channels, as well as an electronic programming guide. We tailor our video services in each country of operation based on programming preferences, culture, demographics and local regulatory requirements.

We also offer a variety of premium channel packages to meet the special interests of our subscribers. For an additional monthly charge, a subscriber may upgrade to one of our extended digital tier services and receive an increased number of video and radio channels, including the channels in the basic tier service and additional HD and 4K channels. Our channel offerings include general entertainment, sports, movies, series, documentaries, lifestyles, news, adult, children and ethnic and foreign channels.

Discounts to our monthly service fees are available to any subscriber who selects a bundle of two or more of our services (**bundled services**): video, internet, fixed-line telephony and, in most of our markets, mobile services. Bundled services consist of double-play for two services, triple-play for three services and, where available, quad-play for four services.

To meet customer demands, we have enhanced our video services with additional relevant content services and features, which increase viewing comfort and address individual user needs. Our latest next generation product suite is called "Horizon 4", a multi-screen entertainment platform that combines linear television (including recording and Replay TV features), premium video-on-demand (VoD) offerings, an increasing amount of integrated premium global and local video apps and mobile viewing into one entertainment experience. Horizon 4 comes with a state-of-the-art personal user interface that is intuitively easy to navigate. Content recommendations and favorite channel settings can be customized to individual user profiles. Video playback control, such as pause and resume, navigation shortcuts and content searches can all be conducted via a voice control button on the remote control, a feature highly appreciated by our customers. Horizon 4 is available in Switzerland and Poland, which have the latest set top boxes capable of delivering 4K video content and achieved significant positive customer feedback, manifesting in high product net promoter score figures. Horizon 4 is marketed under the name "Sunrise TV" in Switzerland and "UPC TV 4K Box" in Poland. The predecessor version of Horizon 4, Horizon 3, is deployed on set-top boxes in Switzerland. In Switzerland these set-top boxes will continue to be exchanged for the latest hardware with Horizon 4 over time. In Slovakia, we provide a Horizon 4-like experience through a remote upgrade of the software on the customer's set-top box. After the upgrade, these boxes offer several features of the Horizon 4 product. We refer to this upgrade as "Horizon Lite", although it is locally marketed as Horizon 4. Some of the Horizon 4 features are not available on our Horizon Lite systems, such as recommendation-based content and the ability to access video content on other devices in the home. We intend to (i) expand the availability of Horizon 4 to other markets within our footprint and (ii) continue to improve the Horizon 4 user experience with new functionality and software updates.

One of our key video services is "Replay TV". Through Replay TV, the last seven days of content (subject to rights related to blackouts) is made available via the electronic programming guide (EPG) for on demand viewing. Customers can simply open the EPG, scroll back and replay linear programming instantly. This same technical solution also allows our customers to replay a television program from the start even while the live broadcast is in progress. Additionally, customers have the option of recording TV programs in the cloud. Replay TV is one of the most used and appreciated features on our platforms. Replay TV is accessible in Switzerland, Poland and Slovakia through Horizon 4 or Horizon Lite, and in some of our markets also via Horizon Go (as defined below).

In most of our markets, we offer transactional VoD giving subscribers access to thousands of movies and television series. In several of our markets, our subscription VoD service is included in certain of our video offerings. This service is tailored to the specific market based on available content, consumer preferences and competitive offers, and includes various programming, such as music, kids, documentaries, adult, sports and TV series. We continue to develop our VoD services to

provide a growing collection of programming from local and international suppliers, such as Disney/Fox, NBC/Universal, CBS/Paramount, Warner Bros. and Sony, among others. In addition, in all of our markets we offer global premium over the top (OTT) services such as Netflix, YouTube and Amazon Prime Video, and we also offer local OTT services via a large portion of of our set-top boxes.

Most of this content is also available via our online mobile app, "**Horizon Go**", which is available on mobile devices (iOS and Android). Thanks to the 360 integration of Horizon 4 across multiple screens, customers can pause a program, series or movie and seamlessly continue watching from where they left off on another device, whether a television, tablet, smart phone or laptop. Additionally, Horizon Go enables customers to remotely schedule the recording of a television program on their Horizon 4 box at home.

In the summer of 2020, we launched our first IP-only streaming device in Poland, which runs the full Horizon 4 product suite and features a small puck-like form factor that can be tucked away behind a TV screen. This all-IP mini 4K capable TV box has extremely low power consumption, and its casing is made from recycled plastic, proudly winning us the Digital TV Europe's Video Tech Innovation Sustainability Award in December 2020 as well as the Red Dot Product Design Award in 2021. We have also launched the all-IP 4K capable TV box in Switzerland and intend to continue the roll out of the all-IP TV box to additional markets. UPC Poland announced in July 2021 that they are entering into agreements with Nordic Entertainment Group (NENT) to provide the "Viaplay" streaming service, a new entrant to the Polish markets.

Mobile Services

Mobile services are another key building block for us to provide customers with seamless connectivity. Sunrise UPC offers mobile services as a mobile network provider and as a MVNO over a third-party network pursuant to a legacy contract with Swisscom prior to the Sunrise Acquisition. UPC Poland also offers mobile services as a MVNO. Where mobile telephony services are provided via MVNOs, the relevant mobile operator leases a third-party's radio access network and owns the core network, including switching, backbone and interconnections. A MVNO arrangement permits us to offer our customers in these markets mobile services without having to build and operate a cellular radio tower network. Our MVNO partners are Swisscom in Switzerland and Orange/Play in Poland. Sunrise UPC in Switzerland is in the process of migrating its subscribers to the Sunrise UPC network, but certain subscribers currently remain on a MVNO plan.

In each of our markets, we offer a range of mobile related services. The majority of subscribers take a post-paid service plan, which has an agreed monthly fee for a set duration (typically 1 to 2 years). The monthly fee will vary depending on the country and service package selected. Service packages can have different levels of data allowances, voice minutes and network speed, as well as differing other aspects, such as roaming charges and contract duration. Post-paid services are also offered as a bundle with fixed services, and by taking a "converged" offering, customers typically receive some benefits such as lower total cost or additional features. Post-paid services are offered to both business and retail consumers. In addition, we offer pre-paid mobile services in Switzerland, where the customers pay in advance for a pre-determined amount of airtime or data and which generally have no minimum contract term.

Telephony Services

Multi-feature telephony services are available through voice-over-internet-protocol (VoIP) technology in most of our broadband communication markets. We pay interconnect fees to other telephony and internet providers when calls by our subscribers terminate on another network and receive similar fees from providers when calls by their users terminate on our network through interconnection points.

Our telephony service may be selected in several of our markets on a standalone basis and in all of our markets in combination with one or more of our other services. Our telephony service includes a basic fixed-line telephony product for line rental and various calling plans, which may consist of any of the following: unlimited network, national or international calling, unlimited off-peak calling and minute packages, including calls to fixed and mobile phones. We also offer value added services, such as a personal call manager, unified messaging and a second or third phone line at an incremental cost.

Partner Networks

For over 70% of the basic video subscribers of Sunrise UPC, Sunrise UPC maintains billing relationships with landlords or housing associations and provides basic video service to the tenants. The landlord or housing association administers the billing for the basic video service with their tenants and manages service terminations for their rental units. When tenants select triple-play bundles with or without mobile service from Sunrise UPC, they then migrate to a direct billing relationship with us.

Sunrise UPC offers broadband internet, video and telephony services directly to the video cable subscribers of those partner networks that enter into service operating contracts with Sunrise UPC. Sunrise UPC has the direct customer billing relationship with these subscribers. By permitting Sunrise UPC to offer some or all of its broadband internet, video and telephony products directly to those partner network subscribers, Sunrise UPC's service operating contracts have expanded the addressable markets for Sunrise UPC's digital products. In exchange for the right to provide digital products directly to the partner network subscribers, Sunrise UPC pays to the partner network a share of the revenue generated from those subscribers. Sunrise UPC also provides network maintenance services and engineering and construction services to its partner networks.

Business Services

In addition to our residential services, we offer business services in all of our operations. For business and public sector organizations, we provide a range of voice, advanced data, video, wireless and cloud-based services, as well as mobile and converged fixed-mobile services. Our business customers include SOHO (generally up to five employees), small business and medium and large enterprises. We also provide business services on a wholesale basis to other operators.

Our business services are designed to meet the specific demands of our business customers with a wide range of services, including increased data transmission speeds and virtual private networks. These services fall into five broad categories:

- data services for fixed internet access, with a 4G connectivity backup, IP virtual private networks based on SDWAN solutions, and high capacity point-to-point services, including dedicated cloud connections;
- cloud collaboration VoIP solutions and circuit switch telephony, unified communications and conferencing options;
- wireless services for mobile voice and data, as well as managed WiFi networks;
- video programming packages and select channel lineups for targeted industries or full programming packages for SOHO customers; and
- value added services, including managed security systems, cloud enabled business applications, storage and web
 hosting.

Our intermediate to long-term strategy is to enhance our capabilities and offerings in the business sector so we become a preferred provider in the business market. To execute this strategy, customer experience and strategic marketing play a key role.

Our business services are provided to customers at contractually established prices based on the size of the business, type of services received and the volume and duration of the service agreement. SOHO and small business customers pay business market prices on a monthly subscription basis to receive enhanced service levels and business features that support their needs. For more advanced business services, these customers generally enter into a service agreement. For medium to large business customers, we enter into individual agreements that address their needs. These agreements are generally for a period of at least one year.

Additional Business Information

Our Network

Our broadband internet, video and fixed-line telephony services are primarily transmitted over a hybrid fiber coaxial (HFC) network. This network is composed primarily of national and regional fiber networks, which are connected to the home over the last few hundred meters by coaxial cable. Alongside our HFC network, we are increasingly rolling out services based on FTTx and leveraging fixed wireless access (FWA) technologies to service customers not covered by our fixed networks in areas where it may not be cost effective to deploy fixed networks.

We closely monitor our network capacity and customer usage. Where necessary, we increase our capacity incrementally, for instance by splitting nodes in our cable network. We also continue to explore improvements to our services and new technologies that will enhance our customer's connected entertainment experience. These actions include:

- recapturing bandwidth and optimizing our networks by:
 - increasing the number of optical nodes in our markets;
 - ° increasing the bandwidth of our hybrid fiber coaxial cable network to 1 GHz;

- ° converting analog channels to digital;
- moving channels to IP delivery;
- deploying additional DOCSIS 3.1 capacity;
- replacing copper lines with modern optic fibers; and
- using digital compression technologies.
- freeing spectrum for high-speed internet, VoD and other services by encouraging customers to move from analog to digital services;
- increasing the efficiency of our networks by moving headend functions (encoding, transcoding and multiplexing) to cloud storage systems;
- deploying converged interconnect network allowing for fixed (FTTx and HFC) and mobile business to consumer and business to business services to optimally use our large fiber optic network infrastructure;
- enhancing our network to accommodate additional business services;
- using wireless technologies to extend our services outside of the home;
- offering remote access to our video services through laptops, smart phones and tablets;
- expanding the availability of Horizon TV, as well as Horizon 4, and related products and developing and introducing online media sharing and streaming or cloud-based video; and
- testing new technologies.

We are expanding our HFC and FTTx footprint. In addition, we are seeking mobile service opportunities where we have established cable networks and expanding our fixed-line networks where we have a strong mobile offering. This will allow us to offer converged fixed-line and mobile services to our customers.

We deliver high-speed data and fixed-line telephony over our broadband network in our markets. The cable networks of our operations are connected to our "Aorta" backbone. The Aorta backbone is recognized as a Tier 1 Carrier, which permits us to serve our customers through settlement free collaboration with other carriers without the cost of using a third-party network.

In support of our connectivity strategy, we are moving our customers into a gigabit society. All of our broadband networks are already capable of supporting the next generation of ultra-high-speed internet service at gigabit speeds. To provide these speeds to our subscribers, we plan to grow our base of DOCSIS 3.1 technology throughout our footprint. The use of DOCSIS 3.1 technology provides us significantly higher efficiencies in our networks and allows us to offer faster speeds, better latency, higher reliability, latest in-home WiFi standards and better services in general. The new gateways and the continued upgrades to our network in the coming years will allow us to maximize high-speed connectivity over our broadband networks and deliver gigabit services in a cost-effective manner. It will also allow us to meet the expectations of our customers for high-speed internet access both in cities and rural areas of our footprint. While DOCSIS 3.1 technology will provide up to 2.5 Gbps with the option to implement further enhancements in the future, such as DOCSIS 4.0 and XGS-PON FTTx, we also have access to all available FTTx in Switzerland through our wholesale access agreements with Swisscom, Swiss Fibre Net and local utilities, which offer speeds of up to 10 Gbps.

Supply Sources

<u>Content</u>. In our markets, entertainment platforms remain a key part of the telecommunication services bundle. Therefore, in addition to providing services that allow our customers to view programming when and where they want, we are investing in content that customers want. Our content strategy is based on:

- proposition (exceeding our customers' entertainment desires and expectations);
- product (delivering the best content available);
- procurement (investment in the best brands, shows and sports); and
- partnering (strategic alignment, acquisitions and growth opportunities).

We license almost all of our programming and on-demand offerings from content providers and third-party rights holders, including broadcasters, collective rights management organizations and cable programming networks. Under our channel distribution agreements, we generally pay a monthly fee on a per channel or per subscriber basis, with occasional minimum pay guarantees. For on-demand programming, we generally pay a revenue share for transactional VoD (occasionally with minimum guarantees) and either a flat fee or a monthly fee per subscriber for subscription VoD. For a majority of our agreements, we seek to include the rights to offer the licensed programming to our customers through multiple delivery platforms and through our apps for smart phones and tablets.

In seeking licenses for content, we partner with leading international and regional pay television providers, such as Disney, Warner Media (including HBO), Sony, AMC, NBC Universal, RTL, the BBC and Discovery. We also seek to carry key public and private broadcasters and we acquire premium programming through select relationships with companies such as Sky plc, HBO and Canal+. For our VoD services, we license a variety of programming, including box sets of television series, movies, music, kids' programming and documentaries.

In recent years, OTT apps have become increasingly important in the content space and, as part of our content strategy, we have put in place deals with a number of global and regional app providers. We currently have arrangements with Netflix International B.V. (Netflix) and with Amazon Europe Core S.A.R.L. (Amazon). Pursuant to these arrangements, the Netflix service and Amazon Prime Video services respectively are available via certain of our set-top boxes to our video customers across many of our markets each as premium OTT services. We also entered into an arrangement with, Google Ireland Limited (Google) for the YouTube and YouTube Kids services, apps for which are available via certain of our set top boxes to our customers in Switzerland and Poland. In order to tailor our entertainment offerings to each market we have added various locally relevant apps such as BluePlay in Switzerland.

Exclusive content is another element of our content strategy. To support this approach, we are investing in content assets. For example, we launched MySports in Switzerland in 2017, based on exclusive live hockey from the Swiss leagues. Sunrise UPC licenses MySports to other platforms in Switzerland.

<u>Customer Premises Equipment</u>. We purchase each type of customer premises equipment from a number of different suppliers. Customer premises equipment includes set-top boxes, modems, WiFi routers and boosters, digital video recorders (**DVRs**), tuners and similar devices. For each type of equipment, we retain specialists to provide customer support. For our broadband services, we use a variety of suppliers for our network equipment and the various services we offer. Similarly, we use a variety of suppliers for mobile handsets to offer our customers mobile services.

<u>Software Licenses</u>. We license software products, including email and security software, and content, such as news feeds, from several suppliers for our internet services. The agreements for these products typically require us to pay a fee for software licenses and/or a share of advertising revenue for content licenses. For our mobile network operations and our fixed-line telephony services, we license software products, such as voicemail, text messaging and caller ID, from a variety of suppliers. For these licenses we seek to enter into long-term contracts, which generally require us to pay based on usage of the services.

For our mobile services provided through MVNO arrangements, we are dependent on third-party wireless network providers. Each of our MVNO operations has an agreement with such a provider to carry the mobile communications traffic of our customers. We seek to enter into medium to long-term arrangements for these services. Any termination of these arrangements could significantly impact our MVNO operated mobile services.

Competition

All of our businesses operate in highly competitive and rapidly evolving markets. The speed of technological advancements is likely to continue to increase, giving customers more options for telecommunications services. Our customers want access to high quality telecommunication products that provide seamless connectivity and experience. Accordingly, our ability to offer converged services (video, internet, fixed telephony and mobile) is a key component of our strategy. In many of our markets, we compete with incumbent companies that provide converged mobile and fixed-line services, as well as companies that are established in one or more communication products. Consequently, our businesses face significant competition. In all markets, we seek to differentiate our offerings by focusing on delivering quality high-speed internet at competitive prices and providing excellent customer service. In this section, we begin with an overview on the competitive nature of the broadband internet, video and mobile and fixed-line telephony services in our markets, and then provide information on key competitors in our more material markets.

We believe that our deep-fiber access provides us with several competitive advantages. For instance, our cable networks enable concurrent delivery of internet access, together with real-time television and VoD content, without impairing our high-speed internet service. In addition, our cable infrastructure allows us to provide triple-play bundled services of broadband internet, television and fixed-line telephony services without relying on a third-party service provider within our footprint. Our business capabilities allow us to provide a comprehensive set of converged mobile and fixed-line services through both our own mobile network and third-party networks. Our capacity is designed to support peak consumer demand, and our networks have been resilient despite significantly increased demand during the COVID-19 pandemic. In serving the business market, many aspects of the network can be leveraged at very low incremental costs.

Overall, we are experiencing increased convergence as customers look to receive all their media and communication services in a more cost-effective way. Each of our competitors has extensive resources, allowing them to offer competitively priced converged services. As a result, our ability to offer high-quality triple-play or quad-play bundles and fixed-mobile convergence bundles is one of our key strategies to attract and retain customers. We seek to distinguish ourselves through our multimedia gateway services, interactive video products (such as Replay TV and VoD), proprietary sports offerings, expanded content offers (for both in and out of the home) and our high-speed connectivity services backed by intelligent in-home WiFi solutions.

Internet

Our businesses face competition in a rapidly evolving broadband marketplace from both incumbent and non-incumbent telecommunications companies, mobile operators and cable-based internet service providers, many of which have substantial resources. The internet services offered by these competitors include both fixed-line broadband internet via cable, digital subscriber lines (DSL) or FTTx and wireless broadband. These competitors have a range of product offerings with varying speeds and pricing, as well as interactive services, data and content services offered to households and businesses. With the demand for mobile internet services increasing, competition from wireless services using various advanced technologies is an important competitive factor. In Switzerland, Sunrise UPC offers 5G to customers without access to a fiber network as a way to provide those customers the highest possible speeds. In this intense competitive environment, internet speed and pricing are the key criteria for customers.

Our strategy is seamless speed leadership. Our focus is on increasing the maximum speed of our connections while providing a reliable customer experience and offering a variety of service tiers, prices, bundled products and a range of value added services, including intelligent in-home connectivity solutions. We update our bundles and packages on an ongoing basis to meet the needs of our customers and to retain an attractive value for money ratio. Ultra-high download speeds of 1 Gbps are available throughout our footprint in Switzerland, as well as large parts of Poland and Slovakia. We use our competitively priced ultra-high-speed internet services to encourage customers to switch to our services from other providers. Our aim is to safeguard our high-end customer base and enable us to become more aggressive at the low- and medium-end of the internet market. By fully utilizing up to 1 Gbps technical capabilities of DOCSIS 3.1 technology on our cable systems, we can compete with any FTTx, DSL or long-term evolution (LTE) players today.

In Switzerland, Swisscom is the largest provider of broadband internet services, and is Sunrise UPC's primary competitor. It is also continuing to expand its FTTx network and is rolling out its G.fast technology. Swisscom offers download speeds ranging from 50 Mbps to up to 10 Gbps, depending on the region. Swisscom continues to expand its FTTx network to Switzerland households in our footprint, as well as in our partner network footprints. Salt, a predominantly mobile player, also competes in this arena, with a focus on fixed-mobile convergence through a combination of FTTx and fixed wireless access technologies offering 10 Gbps internet speeds. In this competitive market, Sunrise UPC recently launched a new "Sunrise We" fixed-mobile convergence portfolio, enabling customers to benefit from the ultra-high-speed connectivity that is available across all of Sunrise UPC's customer premises and offers significant fixed and mobile cross-selling opportunities.

In Slovakia, our key competition in this product market is from the offering of broadband internet products using various FTTx and Docsis-based technologies by the incumbent players and third parties. Our principal competitors in Slovakia are Slovak Telekom (100% owned by Deutsche Telekom AG), Orange SK and Swan offering speeds up to 1 Gbps. The introduction of cheaper and ever faster fixed-line broadband offerings is further increasing the competitive pressure in this market. A notable emerging factor is an overbuild of our networks with FTTx technology by the incumbent players and other third parties. At the moment, we do not consider our networks to be substantially overbuilt; however certain FTTx providers have announced upgrade plans that might indicate increased competition in the future. It is unclear if announced plans will be realized due to significant operational and financial challenges in rolling out FTTx. We are confident that our hybrid fibercoaxial networks can be upgraded to higher speeds, to match or exceed potential FTTx based products.

Video Distribution

Our video services compete primarily with traditional free-to-air (FTA) broadcast television services, direct-to-home (DTH) satellite service providers in Poland and Slovakia, where we compete with long-established satellite platforms, OTT and broadcaster VoD providers, as well as other fixed-line and mobile telecommunications carriers and broadband providers offering a similar range of video services. Many of these competitors have a national footprint and offer features, pricing and video services individually and in bundles comparable to what we offer. In certain markets, we also compete with other cable providers who have overbuilt portions of our systems.

OTT video content providers utilizing our or our competitors' high-speed internet connections are also a significant competitive factor, as are other video service providers that overlap our service areas. The OTT video providers (such as HBO Now, Amazon Prime Video, Netflix, Disney+ and AppleTV+) offer VoD service for television series, movies and programming from broadcasters. Generally, the content libraries of such services are offered for a monthly fee. Typically these services are available on multiple devices in and out of the home. To retain our competitive position, we provide our subscribers with TV everywhere products and premium OTT video services through our online mobile apps, VoD and Replay TV services or through our arrangements with Netflix and Amazon, as well as YouTube and relevant local OTT VoD services. Our businesses also compete to varying degrees with other sources of information and entertainment, such as online entertainment, newspapers, magazines, books, live entertainment/concerts and sporting events.

Our ability to attract and retain customers depends on our continued ability to acquire appealing content, provide easy to use services on acceptable terms and to deliver content on multiple devices inside and outside the home. Some competitors, such as Swisscom in Switzerland, have obtained long-term exclusive contracts for certain programming, which limits the opportunities for other providers to offer such programs. Our operations have limited access to certain of such programming through select contracts with these companies. Moreover, telecommunication providers increasingly offer access to OTT platforms through their systems. If exclusive content offerings increase through other providers, programming options could be a deciding factor for subscribers on selecting a video service.

Similar to our technological advances in our video services (such as launches of Horizon 4, apps on third-party devices and all-IP TV box), our competitors are also improving their video platforms with next generation set-top boxes, TV everywhere products and other interactive services. In all of our markets, competitive video services are offered by both incumbent and non-incumbent telecommunications operators, whose strategies include video services over DSL, very high bit rate DSL (VDSL) and FTTx networks and, in some cases, DTH and digital terrestrial television (DTT). The ability of incumbent operators to offer the triple-play of broadband internet, video and fixed-line telephony services and, in most countries, a quadplay with mobile services, is exerting competitive pressure on our operations, including the pricing and bundling of our video products. In order to gain video market share, the incumbent operators and alternative service providers in a number of our larger markets are pricing their DTT, internet protocol television (IPTV) or DTH video packages at a discount to the retail price of the comparable digital cable service.

We compete on value by offering advanced digital services with a premier user interface, such as cloud recording and DVR functionality, HD/4K, VoD, voice control, OTT aggregation, Replay TV and multiscreen services via a superior user interface. We also compete by offering attractive content packages, as well as bundled services, at reasonable prices. In each of the countries where we operate, we tailor our packages to include attractive channel offerings and offer recurring discounts for bundled services and loyalty contracts, as well as integrated billing for OTT services. In addition, from time to time, we modify our digital channel offerings to improve the quality of our programming. Where mobile voice and data are available, we focus on our converged service offerings at attractive prices. In our other operations, we use the triple-play bundle as a means of driving video, as well as other products where convenience and price can be leveraged across the portfolio of services. We also continue to enhance our Horizon 4 platform to meet our customers' desire to view programming anytime and anywhere, such as new applications and expanding its availability in our markets.

Sunrise UPC Competitors. Our main competitor in Switzerland is Swisscom, the incumbent telecommunications operator, which provides IPTV services over DSL, VDSL and FTTx networks. Swisscom offers VoD services, DVR and replay functionality, HD channels and has exclusive rights to distribute certain sports programming. Swisscom launched an advanced set-top box in the market with voice control, Smart Home integration and content aggregation beyond video, such as music streaming and gaming services. Although its presence is limited, Salt focuses on value propositions by including TV within their bundles and providing access to OTT via Apple TV. In this saturated market, price competition and high promotional intensity are significant factors. To compete effectively in Switzerland, Sunrise UPC is promoting Horizon 4 (marketed as "UPC TV") and related family of products together with Replay TV and VoD, giving subscribers the ability to personalize their programming and viewing preferences while delivering excellent user interface with voice control. Sunrise UPC has its own

sports channel, *My Sports* and aggregates third-party apps (e.g. Netflix, Amazon Prime and YouTube). Moreover, in October 2021, Sunrise UPC expanded its video product offering to Yallo, its ancillary brand. This is an important step in moving Yallo to full telecommunications functionality, allowing Yallo customers to access over 270 channels (many in Full HD and Dolby Digital), Replay services and streaming apps such as Netflix, Disney+ and Amazon Prime which come pre-installed on the TV box.

UPC Slovakia Competitors. In providing video services, UPC Slovakia competes primarily with quadruple-play convergent players Slovak Telekom (100% owned by Deutsche Telekom AG) and Orange SK, both offering video services through FTTx/xDSL and satellite, as well as with other internet providers such as Swan or Antik offering triple-play services through FTTx.

Mobile and Telephony Services

We substantially expanded our mobile business with the acquisition of Sunrise in Switzerland. In our other European markets, however, we currently have limited mobile presence. In Switzerland, we continue to deploy additional bandwidth to deliver our wide range of services to our customers and expand our LTE networks and 5G services. In Switzerland, the key dominant telephony provider is Swisscom. Swisscom is also the largest mobile operator in Switzerland based on number of SIM cards. Our main competitors include their mobile products in bundles with fixed-line services. Moreover, there is a fundamental shift in customer preference towards mobile. As a result, we expect fixed telephony users to decline in favor of mobile connectivity.

We offer various calling plans, such as unlimited calling, national or international calling, unlimited off-peak calling and minute packages, including calls to fixed and mobile phones. In addition, we use converged bundles and benefits to cross-sell mobile our existing fixed customers. Our ability to offer fixed-mobile convergence services is a key driver of growth.

The market for fixed-line telephony services is saturated in almost all of our markets. Changes in market share are driven by the combination of price and quality of services provided and the inclusion of telephony services in bundled offerings. Our fixed-line telephony services compete against the incumbent telecommunications operators. In all of our markets, we also compete with other VoIP operators offering service across broadband lines. In addition, our businesses face competition from other cable telephony providers, FTTx-based providers or other indirect access providers.

Regulatory Matters

General Overview

Video distribution, broadband internet, fixed-line telephony and mobile businesses are regulated in each of the countries in which we operate. The scope of regulation varies from country to country, although in some significant respects regulation in European markets is harmonized under the regulatory structure of the European Union (E.U.).

Slovakia and Poland are part of the E.U. Switzerland is a separate jurisdiction that generally enacts rules similar to that of the E.U. In Switzerland, most aspects of the distribution of radio and television are regulated under the Radio and television Act. In addition, the Competition Act, the Data Protection Act and the Act on the Surveillance of Post and Telecommunications (the **Telecommunications Act**) are potentially relevant to our business.

Regulation in Switzerland, which is not a Member State of the E.U., is discussed separately below, as well as regulations in certain Member States in which we face regulatory issues that may have a material impact on our business.

Sector Regulations

The European Electronic Communications Code (the **Code**) is the primary source of regulation governing our E.U. operations. The Code came into effect on December 20, 2018 and is in the process of being transposed by the Member States into their respective national laws. On September 23, 2021, the European Commission warned a number of Member States for being late with the transposition, including Poland and Slovakia. The Member states in question were required to adopt and notify the relevant measures within two months - which we have not seen to date. The Commission may refer their cases to the Court of Justice of the European Union. Switzerland, while not part of the E.U., has a regulatory system that partially reflects the principles of the E.U. The Telecommunications Act in Switzerland regulates, in general, the transmission of information, including the transmission of radio and television signals.

The Code primarily seeks to develop open markets for communication services within Europe. It harmonizes the rules within the E.U. for the establishment and operation of electronic communication networks, including cable television and traditional telephony networks, and the offer of electronic communication services, such as telephony (including OTT services), internet and, to some degree, television services.

Set forth below are certain key provisions included in the Code that could potentially impact our operations.

• <u>Significant Market Power</u>. Specific obligations imposed by National Regulatory Authorities (**NRA**s) in the E.U. Member States apply only to service providers deemed to have Significant Market Power (**SMP**) in a relevant market. For purposes of the Code, a service provider has SMP where it enjoys a position of significant economic strength, affording it the power to behave independently of competitors, customers and consumers to an appreciable extent.

If a service provider is found to have SMP in any particular market, the applicable NRA must impose certain conditions on that service provider.

In Switzerland, a service provider can be regulated based on general competition law.

<u>Must-Carry Obligations</u>. Member States may impose reasonable must-carry obligations on certain service providers
under their jurisdiction. Such obligations must be based on clearly defined general interest objectives, be proportionate
and transparent and be subject to periodic review. Switzerland has a regulatory system that reflects these principles.
We are subject to must carry regulations in all markets in which we operate, and we do not expect the such obligations
to be curtailed in the foreseeable future.

Net Neutrality, Roaming and Call Termination

In November 2015, the European Parliament adopted the regulation on the first E.U.-wide net neutrality regime. The regulation allows for specialized services, optimized for specific content and subjects service providers to reasonable traffic management requirements. The Telecommunications Act in Switzerland introduced more transparent net neutrality regulation that allows for traffic management in very limited circumstances (e.g., to fight exceptional network congestion). Customers must be informed if traffic is treated unequally and about the quality of the internet service (for both fixed and mobile internet).

The 2015 regulation mentioned above also prohibits retail roaming tariffs and sets wholesale roaming price caps. In 2019 the E.U. introduced caps on wholesale rates for intra-E.U. calls to bring these in line with the wholesale roaming caps. The Telecommunications Act in Switzerland implemented roaming obligations, including mandatory discounted roaming packages, per second or per kilobyte of roaming charges and capped fees for all roaming services.

Call termination tariffs for SMP providers are set by NRAs, but for the E.U., the Code includes a system of single maximum E.U.-wide voice termination rates for fixed and mobile. In 2022, all fixed service providers will be subject to a maximum fixed termination rate of 0.07 per minute and by 2024 the single maximum rate for mobile termination will be 0.20 per minute. In all countries where we operate, we have been found to have SMP for call termination.

Broadcasting and Content Law

The Audiovisual Media Services Directive (**AVMSD**) governs the activities of broadcasters under E.U. law. The AVMSD is in the process of being transposed by the Member States into their respective national laws. On September 23, 2021, the European Commission warned a number of Member States for being late with the transposition, including Slovakia. The Member States in question were required to adopt and notify the relevant measures within two months, which we have not seen to date. The Commission may refer their cases to the Court of Justice of the European Union.

Generally, broadcasts originating in and intended for reception within an E.U. Member State must respect the laws of that Member State. Pursuant to the AVMSD, however, E.U. Member States must allow broadcast signals of broadcasters established in another E.U. Member State to be freely transmitted within their territory, so long as the broadcaster complies with the law of their home state. In addition, when we offer third-party VoD services on our network, it is the third-party provider, and not us as the distributor, that is regulated in respect of these services. Switzerland has regulatory systems that also reflect these principles.

The AVMSD established quotas, applicable to both linear and non-linear services, for the transmission of European-produced programming and programs made by European producers who are independent of broadcasters. Such obligations are applicable to our businesses in the E.U. Switzerland has regulatory systems that similarly reflect these principles.

Member States are also allowed to require service providers to contribute financially to the production of European works, including requiring financial contributions from VoD providers established in other territories that targets audiences in their jurisdiction. Such obligations are applicable to (or are expected to become applicable to) certain of our businesses.

In addition, European Commission regulations mandate that commercial providers of online content services (including OTT service providers) enable subscribers who are temporarily present in any Member State to access and use online content services in substantially the same manner as in their Member State of residence. Our services comply with these portability requirements.

Technological Regulation

The European Commission is increasingly imposing additional mandatory requirements regarding energy consumption of the telecommunications equipment we provide our customers. We have been working to lower power consumption of our settop boxes. Legislation in this area may be adopted that could adversely affect the cost and/or the functionality of equipment we deploy to customers.

Pursuant to an E.U. Regulation on standby power (the **Standby Regulation**), many devices are required to have either a low power standby mode or off mode, unless such mode is inappropriate for the intended use of the product. In particular, the Standby Regulation sets, among others, the maximum power consumption of networked consumer equipment while in the so-called "Networked Standby" mode. As a result, all of the devices we purchase and/or develop operate under the power management requirements of the Standby Regulation.

Also, the E.U.'s Radio Equipment Directive regulates radio equipment held for sale. It sets essential requirements for safety and health, electromagnetic compatibility and the efficient use of the radio spectrum. This directive also provides the basis for further regulation governing some additional aspects, including technical features for the protection of privacy, personal data and fraud, interoperability, access to emergency services, and compliance regarding the combination of radio equipment and software. The European Commission recently adopted a delegated act under the Radio Equipment Directive to improve network resilience and better protect consumer's privacy. The delegated act will enter into force during the first quarter of 2022 and will apply beginning on August 1, 2024.

Due to a Mutual Recognition Agreement established between the E.U. and Switzerland, the Standby Regulation and the Radio Equipment Directive also applies in Switzerland.

Through the E.U.'s Radio Spectrum Policy Program, certain spectrum has been approved for mobile broadband use. The terms under which this spectrum becomes available varies among the European countries in which we operate, and certain uses of this spectrum may interfere with services carried on our cable networks. If this occurs, we may need to: (1) avoid using certain frequencies on our cable networks for certain of our services, (2) make some changes to our networks, or (3) change the equipment that we deploy. We are in ongoing discussions with relevant Member States and the European Commission to develop mitigation techniques to reduce some of this interference, but we cannot predict the ultimate outcome of these discussions.

Privacy Regulation

In May 2018, the General Data Protection Regulation (**GDPR**) became effective in the E.U. The GDPR sets strict standards regarding the handling, use and retention of personal data. Organizations that fail to comply face stiff penalties. In addition, in January 2017, the European Commission published a proposal for a new e-Privacy regulation. Negotiations among E.U. Member States are still in process, and we cannot predict the ultimate outcome of these negotiations.

The GDPR applies to the European Economic Area (**EEA**), which includes the E.U. and a number of countries, not including Switzerland. When personal data is transferred outside the EEA, special safeguards stemming from the GDPR, such as the adoption of adequacy decisions and the use of standard contractual clauses (**SCCs**), are enforced to ensure that data is transferred in a protected manner. Adequacy decisions indicate which third countries have in place data protection laws sufficiently similar to those provided under the GDPR. Transfers to an "adequate" third country is compared to a transmission of data within the E.U.

When a data transfer involves a third country that has not been granted an adequacy decision, our operations must use SCCs. On June 4, 2021, the European Commission issued an implementing decision on new SCCs, applicable as of September

27, 2021. Using standard contractual clauses does not automatically make an international data transfer GDPR compliant. Instead, the parties must perform "transfer impact assessments" in order to address any possible risks in the data transfer and take supplementary measures. The impact assessment takes into account maters such as the circumstances of the transfer, the nature of the parties, the personal data involved and the laws and practices of the country of destination.

A continued flow of personal data from the EEA to Switzerland is ensured by the Swiss Data Protection Act (**DPA**). The Swiss Parliament adopted a revised version of the DPA that provides more transparency regarding the processing of data and strengthens the individual's information rights (e.g., if his/her data is processed in a foreign country.

Other European Regulations

In addition to the industry-specific regimes discussed above, our operating companies must comply with a range of both specific and general legislation concerning cybersecurity and consumer protection, among other matters.

With respect to cybersecurity, in 2016, the E.U. adopted a directive on security of network and information systems (**NIS Directive**), which provides legal measures to boost the overall level of cybersecurity in the E.U. Our operations in the E.U. do not fall under the NIS Directive, but a transposition of the Directive in Ireland and the Netherlands has effectively introduced the NIS Directive concepts into those jurisdictions. In December 2020, the European Commission presented a revised version of the legislation that seeks to expand the scope of the NIS Directive, adding new sectors, including telecommunication providers. If adopted, more of our operations may become subject to the security requirements of this second NIS Directive.

During 2020, across the E.U., restrictions related to so-called "high-risk vendors" (HRVs) in the telecommunications sector were announced. The E.U. published a "toolbox" for regulating 5G networks, which acknowledges the need for a risk assessment of 5G equipment suppliers and the need for adopting mitigating measures by E.U. governments. Some Member States are addressing security concerns by identifying individual HRVs in advance, whose equipment should be excluded or limited for all network operations in the country. The Swiss government is also considering new draft measures in the field of telecommunications security.

The Digital Services Act and the Digital Markets Act currently being discussed by the European Parliament do not, as currently contemplated, appear to impact our businesses. However, we cannot predict what the final legislation will say.

Our operating companies are also subject to both national and European level regulations on competition and on consumer protection, which are largely regulated under the Code. For example, while our operating companies may offer their services in bundled packages in European markets, they are sometimes not permitted to make a subscription to one service, such as cable television, conditional upon a subscription to another service, such as telephony. They may also face restrictions on the degree to which they may discount certain products included in the bundled packages.

Real Property

We lease the facilities necessary for the operation of our business, including office space, technical support and engineering space, customer service space, network center space and other property necessary for our operations. Our combined entities and affiliates own or lease the fixed assets necessary for the operation of their respective businesses, including office space, transponder space, headend facilities, rights of way, cable television and telecommunications distribution equipment, telecommunications switches, base stations, cell towers and customer premises equipment and other property necessary for their operations. The physical components of their broadband networks require maintenance and periodic upgrades to support the new services and products they introduce. Subject to these maintenance and upgrade activities, our management believes that our current facilities are suitable and adequate for our business operations for the foreseeable future.

RISK FACTORS

In addition to the other information contained in this annual report, you should consider the following risk factors in evaluating our results of operations, financial condition, business and operations. The risk factors described in this section have been separated into four groups:

- risks that relate to the competition we face and the technology used in our businesses;
- risks that relate to operating in our markets and applicable legislative and regulatory matters;
- risks that relate to certain financial matters; and
- other risks, including risks that, among other things, relate to our management, principal shareholder and related parties.

Although we describe below and elsewhere in this annual report the risks we consider to be the most material, there may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that also could have material adverse effects on our results of operations, financial condition, business or operations in the future. In addition, past financial performance may not be a reliable indicator of future performance and historical trends should not be used to anticipate results or trends in future periods.

If any of the events described below, individually or in combination, were to occur, our businesses, prospects, financial condition, results of operations and/or cash flows could be materially adversely affected.

Risks Relating to Competition and Technology

We operate in increasingly competitive markets, and there is a risk that we will not be able to effectively compete with other service providers. The markets for cable television, broadband internet, telephony and mobile services are highly competitive. In the provision of video services, we face competition from FTA broadcasters, video provided via satellite platforms, internet service providers that offer video services, OTT video service providers, and, in some countries where parts of our systems are overbuilt, cable operators, among others. Our operating businesses are facing increasing competition from video services provided by, or over the networks of, incumbent telecommunications operators and other service providers. As the availability and speed of broadband internet increases, we also face competition from OTT video content providers utilizing our or our competitors' high-speed internet connections. In the provision of telephony and broadband internet services, we are experiencing increasing competition from the incumbent telecommunications operators and other service providers in each country in which we operate, as well as providers of mobile voice and data. The incumbent telecommunications operators typically dominate the market for these services and have the advantage of nationwide networks and greater resources than we have to devote to the provision of these services. Many of the incumbent operators offer double-play, triple-play and quad-play bundles of services. In many countries, we also compete with other operators using local loop unbundling (LLU) to provide these services, other facilities-based operators and wireless providers. Developments in the DSL as well as investments into FTTx technology by the incumbent telecommunications operators and alternative providers have improved the attractiveness of our competitors' products and services and strengthened their competitive position. Developments in wireless technologies, such as 5G and FWA, are creating additional competitive challenges.

In some of our markets, national and local government agencies may seek to become involved, either directly or indirectly, in the establishment of FTTx networks or other communications systems. We intend to pursue available options to restrict such involvement or to ensure that such involvement is on commercially reasonable terms. There can be no assurance, however, that we will be successful in these pursuits. As a result, we may face competition from entities not requiring a normal commercial return on their investments. In addition, we may face more vigorous competition than would have been the case if there were no government involvement.

We expect the level and intensity of competition to continue to increase from both existing competitors and the influx of new market entrants as a result of changes in the regulatory framework of the industries in which we operate, as well as strategic alliances and cooperative relationships among industry participants. Increased competition could result in increased customer churn, reductions of customer acquisition rates for some products and services and significant price and promotional competition in our markets. In combination with difficult economic environments, these competitive pressures could adversely impact our ability to increase or, in certain cases, maintain the revenue, average revenue per customer relationship or mobile subscriber, as applicable (ARPU), customers, mobile subscribers, Segment Adjusted EBITDA (as defined in note 17 to our combined financial statements included in Part II of this annual report), Segment Adjusted EBITDA margins (Segment Adjusted EBITDA divided by revenue) and liquidity of our operating segments.

Changes in technology may limit the competitiveness of and demand for our services. Technology in the video, telecommunications and data services industries is changing rapidly, including advances in current technologies and the emergence of new technologies. New technologies, products and services may impact consumer behavior and therefore demand for our products and services. The ability to anticipate changes in technology and consumer tastes and to develop and introduce new and enhanced products and services on a timely basis will affect our ability to continue to grow, increase our revenue and number of subscribers and remain competitive. New products and services, once marketed, may not meet consumer expectations or demand, can be subject to delays in development and may fail to operate as intended. A lack of market acceptance of new products and services that we may offer, or the development of significant competitive products or services by others, could have a material adverse impact on our revenue and Segment Adjusted EBITDA.

Our property and equipment additions may not generate a positive return. Significant additions to our property and equipment are, or in the future may be, required to add customers to our networks and to upgrade or expand our broadband communications networks and upgrade customer premises equipment to enhance our service offerings and improve the customer experience. Additions to our property and equipment, which are currently underway, require significant capital expenditures for equipment and associated labor costs to build out and/or upgrade our networks as well as for related customer premises equipment. Additionally, significant competition, the introduction of new technologies, the expansion of existing technologies, such as FTTx and advanced DSL technologies, the impact of natural disasters, or adverse regulatory developments could cause us to decide to undertake previously unplanned builds or upgrades of our networks and customer premises equipment.

No assurance can be given that any newbuilds, rebuilds, upgrades or extensions of our network will increase penetration rates, increase ARPU, or otherwise generate positive returns as anticipated, or that we will have adequate capital available to finance such future newbuilds, rebuilds, upgrades or extensions. Additionally, costs related to our property and equipment additions could end up being greater than originally anticipated or planned. If this is the case, UPC Holding Group may require additional financing sooner than anticipated or we may have to delay or abandon some or all of our development and expansion plans or otherwise forego market opportunities. Additional financing may not be available on favorable terms, if at all, and our ability to incur additional debt will be limited by our debt agreements. If we are unable to, or elect not to, pay for costs associated with adding new customers, expanding, extending or upgrading our networks or making our other planned or unplanned additions to our property and equipment, or are delayed in making such investments, our growth could be limited and our competitive position could be harmed.

We depend almost exclusively on our relationships with third-party programming providers and broadcasters for programming content, and a failure to acquire a wide selection of popular programming on acceptable terms could adversely affect our business. The success of our video subscription business depends, in large part, on our ability to provide a wide selection of popular programming to our subscribers. We generally do not produce our own content, and we depend on our agreements, relationships and cooperation with public and private broadcasters, rights holders and collective rights associations to obtain such content. If we fail to obtain a diverse array of popular programming for our pay television services, including a sufficient selection of HD channels as well as non-linear content (such as a selection of attractive VoD) content and rights for ancillary services such as DVR and catch up or "Replay" services), on satisfactory terms, we may not be able to offer a compelling video product to our customers at a price they are willing to pay. Additionally, we are frequently negotiating and renegotiating programming agreements and our annual costs for programming can vary. There can be no assurance that we will be able to renegotiate or renew the terms of our programming agreements on acceptable terms or at all. There has also been a rise in the number of direct-to-consumer offerings from content owners which impacts negotiations and the content, rights available and restrictions imposed on us. Programming and copyright costs represent a significant portion of our operating costs and are subject to rise in future periods due to various factors, including (i) higher costs associated with the expansion of our digital video content, including rights associated with ancillary product offerings and rights that provide for the broadcast of live sporting events and (ii) rate increases.

If we are unable to obtain or retain attractively priced competitive content, demand for our existing and future television services could decrease, thereby limiting our ability to attract new customers, maintain existing customers and/or migrate customers from lower tier programming to higher tier programming, thereby inhibiting our ability to execute our business plans. Furthermore, we may be placed at a competitive disadvantage if certain of our competitors obtain exclusive programming rights, particularly with respect to popular sports and movie programming, and as certain players in the OTT market, for example, Netflix, increasingly produce their own exclusive content.

We depend on third-party suppliers and licensors to supply necessary equipment, software and certain services required for our businesses. We rely on third-party vendors for the equipment, software and services that we require in order to provide services to our customers. Our suppliers often conduct business worldwide and their ability to meet our needs are subject to various risks, including political and economic instability, natural calamities, interruptions in transportation or supply chain systems, terrorism and labor issues. As a result, we may not be able to obtain the equipment, software and services required for our businesses on a timely basis or on satisfactory terms. Any shortfall in customer premises equipment could lead to delays in connecting customers to our services, and accordingly, could adversely impact our ability to maintain or increase our customers, revenue and cash flows. Also, if demand exceeds the suppliers' and licensors' capacity or if they experience financial difficulties, the ability of our businesses to provide some services may be materially adversely affected, which in turn could affect our businesses' ability to attract and retain customers. We have experienced certain business disruptions due to the worldwide silicon shortage, which has increased the delivery lead times and pricing of certain of our key components. We cannot predict how long such shortages will continue or what future disruptions will mean to our business. Although we actively monitor the creditworthiness of our key third-party suppliers and licensors, the financial failure of a key third-party supplier or licensor could disrupt our operations and have an adverse impact on our revenue and cash flows. Additionally, we rely upon our owned or licensed intellectual property to use various technologies, conduct our operations and sell our products and services. Legal challenges could be made against our use of our owned or licensed intellectual property rights (such as trademarks, patents and trade secrets) and we may be required to enter into licensing arrangements on unfavorable terms, incur monetary damages or be enjoined from use of the intellectual property rights in question.

Spectrum cost and availability and regulation may adversely affect our business, financial condition and operating results. As we continue to enhance the quality of our services in certain geographic areas and deploy new technologies, including 5G, we may need to acquire additional spectrum in the future. As a result, we will continue to actively seek to make additional investment in spectrum, which could be significant. The continued interest in, and acquisition of, spectrum by existing carriers and others may reduce our ability to acquire, and increase the acquisition cost of, spectrum in the secondary market or negatively impact our ability to gain access to spectrum through other means, including government auctions. Our return on investment in spectrum depends on our ability to attract additional customers and to provide additional services and usage to existing customers. Additionally, applicable regulatory bodies may not be able to provide sufficient additional spectrum to auction. We may also be unable to secure the spectrum necessary to maintain or enhance our competitive position in auctions or in the secondary market, on favorable terms or at all. Certain regulatory bodies may impose conditions on the acquisition, and use of, new wireless broadband mobile spectrum that may negatively impact our ability to obtain spectrum economically or in appropriate configurations or coverage areas. If we cannot acquire needed spectrum, if competitors acquire spectrum that allows them to provide competitive services or if we cannot deploy services over acquired spectrum on a timely basis without burdensome conditions, at reasonable costs, and while maintaining network quality levels, our ability to attract and retain customers and our business, financial condition and operating results could be materially adversely affected.

Our businesses that offer mobile telephony and data services rely on the radio access networks of third-party wireless network providers to carry our mobile communications traffic. Our services to mobile customers rely on the use of MVNO arrangements in which we utilize the radio access networks of third-party wireless network providers to carry our mobile communications traffic. If any of our MVNO arrangements are terminated, or if the respective third-party wireless network provider fails to provide the services required under a MVNO arrangement, or if a third-party wireless network provider fails to deploy and maintain our network, and we are unable to find a replacement network operator on a timely and commercially reasonable basis or at all, we could be prevented from continuing the mobile services relying on such MVNO arrangement. Additionally, as our MVNO arrangements come to term, we may not be able to renegotiate renewal or replacement MVNO arrangements on the same or more favorable terms.

We may not be successful at entering new businesses or broadening the scope of our existing product and service offerings. From time to time, we enter into new businesses that are adjacent or complementary to existing businesses and that broaden the scope of our existing product and service offerings. We may not achieve our expected growth if we are not successful in these efforts. In addition, entering into new businesses and broadening the scope of our existing product and service offerings may require significant upfront expenditures that we may not be able to recoup in the future. These efforts may also divert management's attention and expose us to new risks and regulation, which may have a material adverse effect on our business, results of operations and financial condition.

Failure in our or our third-party technology or telecommunications systems, leakage of sensitive customer data, or security breaches could significantly disrupt our operations, reduce our customer base and result in fines, litigation or lost revenue. Our success depends, in part, on the continued and uninterrupted performance of our information technology and network systems, including internet sites, data hosting and processing facilities and other hardware, software and technical applications and platforms, as well as our customer service centers. Some of these are managed, hosted, provided or used by

third-party service providers or their vendors to assist in conducting our business. In addition, the hardware supporting a large number of critical systems for our cable network in a particular country is housed in a relatively small number of locations. Our and our third-party service providers' systems and equipment (including our routers and set-top boxes) are vulnerable to damage or security breach from a variety of sources, including telecommunications failures, power loss, malicious human acts, security flaws, and natural disasters. Moreover, despite security measures, unauthorized parties may gain access to or disrupt our or our third-party service providers' servers, systems and equipment by, among other things, hacking into our servers, systems and equipment or those of our third-party service providers through fraud, computer viruses, worms, phishing, physical or electronic break-ins or burglaries, or errors by our or our third-party service providers' employees. We and our third-party service providers may not be able to anticipate or respond in an adequate and timely manner to attempts to obtain authorized access to, disable or degrade our or our third-party service providers' systems because the techniques for doing so change frequently, are increasingly complex and sophisticated and are difficult to detect for periods of time. In addition, as discussed further below, the security measures and procedures we and our third-party service providers have in place to protect personal data and other information may not be sufficient to counter all data security breaches, cyber-attacks or system failures. In some cases, mitigation efforts may depend on third parties who may not deliver products or services that meet the required contractual standards or whose hardware, software or network services may be subject to error, defect, delay or outage.

Through our operations, sales and marketing activities, we collect and store certain personal information related to our customers. This may include phone numbers, drivers license numbers, contact preferences, personal information stored on electronic devices and payment information, including credit and debit card data. We also gather and retain information about employees in the normal course of business. In certain circumstances, where it is lawful to do so, we may share information about such persons with third-party service providers that assist with certain aspects of our business. Unauthorized parties may attempt to gain access to such data and information using the same methods described above. As a result, data and information we gather could be subject to misappropriation, misuse, leakage, falsification or accidental release or loss of information maintained in our information technology systems and networks and those of our third-party service providers, including customer and personnel data. As a result of the increasing awareness concerning the importance of safeguarding personal information, the potential misuse of such information and legislation that has been adopted or is being considered across all of our markets regarding the protection, privacy and security of personal information, information-related risks are increasing, particularly for businesses like ours that handle a large amount of personal data. Failure to comply with these data protection laws may result in, among other consequences, fines, litigation or regulatory actions by state, federal or non-U.S. authorities.

Despite the precautions we have taken, unanticipated problems affecting our systems and equipment could cause business disruptions such as failures in our information technology systems, disruption in the transmission of signals over our networks, unauthorized access to the data and information we gather or similar problems. Further, although we devote significant resources to our cybersecurity programs and have implemented security measures to protect our systems and data, and to prevent, detect and respond to data security incidents, there can be no assurance that our efforts will prevent these threats. Any disruptive situation that causes loss, misappropriation, misuse or leakage of data could damage our reputation and the credibility of our operations, and could subject us to potential liability, including litigation or other legal actions against us, the imposition of penalties, fines, fees or liabilities, which may not be covered by our insurance policies, and lost customers and revenue. While we maintain cyber liability insurance that provides both third-party liability and first-party liability insurance coverage, such insurance may not be sufficient to protect against all of our businesses' losses from any future disruptions or breaches of their systems or other events as described above. Also, a cybersecurity breach and the changing cybersecurity landscape could require us to devote significant management resources to address the problems associated with the breach and to expend significant additional resources to further upgrade the security measures we employ to protect customer, employee and other personal information against cyber-attacks and other wrongful attempts to access such information, which could result in a disruption of our operations. This includes additional infrastructure capacity spending to mitigate any system degradation and the reallocation of resources from development activities. To date we have not been subject to cyberattacks or network disruptions that, individually or in the aggregate, have been material to our operations or financial condition. Although we have not detected another material security breach or cybersecurity incident to date, we have been the target of events of this nature and expect to be subject to similar attacks in the future.

Risks Relating to Legislative, Regulatory and Market Specific Matters

We are exposed to foreign currency exchange rate risk. We are exposed to foreign currency exchange rate risk with respect to our combined debt in situations where our debt is denominated in a currency other than the functional currency of the operations whose cash flows support our ability to repay or refinance such debt. Although we generally seek to match the denomination of our and our combined entities' borrowings with the functional currency of the operations that are supporting the respective borrowings, market conditions or other factors may cause us to enter into borrowing arrangements that are not denominated in the functional currency of the underlying operations (unmatched debt). In these cases, our policy is to provide for an economic hedge against foreign currency exchange rate movements by using derivative instruments to synthetically convert unmatched debt into the applicable underlying currency. At December 31, 2021, substantially all of our debt was either directly or synthetically matched to the applicable functional currencies of the underlying operations.

In addition to the exposure that results from the mismatch of our borrowings and underlying functional currencies, we are exposed to foreign currency risk to the extent that we enter into transactions denominated in currencies other than our or our combined entities' respective functional currencies (non-functional currency risk), such as equipment purchases, programming contracts, notes payable and notes receivable (including intercompany amounts). Changes in exchange rates with respect to amounts recorded on our combined balance sheets related to these items will result in unrealized (based upon period-end exchange rates) or realized foreign currency transaction gains and losses upon settlement of such transactions. Moreover, to the extent that our revenue, costs and expenses are denominated in currencies other than our respective functional currencies, we will experience fluctuations in our revenue, costs and expenses solely as a result of changes in foreign currency exchange rates. Generally, we will consider hedging non-functional currency risks when the risks arise from agreements with third parties that involve the future payment or receipt of cash or other monetary items to the extent that we can reasonably predict the timing and amount of such payments or receipts and the payments or receipts are not otherwise hedged. In this regard, we have entered into foreign currency forward contracts to hedge certain of these risks. For additional information concerning our foreign currency forward contracts, see note 6 to our combined financial statements included in Part II of this annual report.

Our businesses are subject to risks of adverse regulation. Our businesses are subject to the unique regulatory regimes of the countries in which they operate. Video distribution, broadband internet, telephony and mobile services are subject to licensing or registration eligibility rules and regulations, which vary by country. Countries in which we operate may adopt laws and regulations regarding electronic commerce, which could dampen the growth of the internet services being offered and developed by our businesses. In a number of countries, our ability to increase prices or change our services, including the programming packages we offer, is limited by regulation or conditions imposed by competition authorities or is subject to review by regulatory authorities or is subject to termination rights of customers. More significantly, regulatory authorities may require us, particularly if we are deemed to possess SMP, to grant third parties access to our networks, facilities or services to distribute their own services or resell our services to end customers. Consequently, our businesses must adapt their ownership and organizational structures as well as their pricing and service offerings to satisfy the rules and regulations to which they are subject. A failure to comply with applicable rules and regulations could result in penalties, restrictions on our business, loss of required licenses or other adverse conditions. Adverse changes in rules and regulations could:

- impair our ability to use our networks in ways that would generate maximum revenue and Segment Adjusted EBITDA;
- create a shortage of capacity on our networks, which could limit the types and variety of services we seek to provide our customers;
- impact our ability to access spectrum for our mobile services;
- strengthen our competitors by granting them access and lowering their costs to enter into our markets; and
- significantly and adversely impact our results of operations.

Businesses, including ours, that offer multiple services, such as video distribution as well as internet, telephony, and/or mobile services, or that are vertically integrated and offer both video distribution and programming content, often face close regulatory scrutiny from competition authorities. This is particularly the case with respect to any proposed business combinations, which often require clearance from the European Commission or national competition authorities, which can block, impose conditions on or delay an acquisition, thus possibly hampering our opportunities for growth. In the event conditions are imposed and we fail to meet them in a timely manner, the relevant authority may impose fines and, if in connection with a merger transaction, may require restorative measures, such as a mandatory disposition of assets or divestiture of operations.

For information regarding certain other regulatory developments that could adversely impact our results of operations in future periods, see *Legal and Regulatory Proceedings and Other Contingencies - Other Regulatory Matters* in note 16 to our combined financial statements included in Part II of this annual report.

New and existing legislation may significantly alter the regulatory regime applicable to us, which could adversely affect our competitive position and profitability, and we may become subject to more extensive regulation, particularly if we are deemed to possess significant market power in any of the markets in which we operate. Significant changes to the existing regulatory regime applicable to the provision of video, telephony and internet services have been and are still being introduced. For example, in the E.U. a large element of regulation affecting our business derives from a number of legal measures, which we refers to as "Directives" and that are the basis of the regulatory regime concerning many of the services we offer across the E.U. The various Directives require Member States to harmonize their laws on communications and cover issues such as access, user rights, privacy and competition. These Directives are reviewed by the E.U. from time to time and any changes to them could lead to substantial changes in the way in which our businesses are regulated and to which they would have to adapt. In addition, we are subject to review by competition or national regulatory authorities in certain countries concerning whether we exhibit significant market power. A finding of significant market power could result in us becoming subject to open access, pricing and other requirements that could potentially advantage our competitors.

We cannot be certain that we will be successful with respect to acquisitions, dispositions, partnerships or other similar transactions, or that we will achieve the anticipated benefits thereof. Historically, our businesses have grown, in part, through selective acquisitions that enabled them to take advantage of existing networks, local service offerings and region-specific management expertise, and we have also taken advantage of attractive opportunities to sell select businesses. We expect to seek to continue improving our company through attractive acquisitions, dispositions, partnerships or other similar transactions in selected markets, such as the sale of UPC DTH in May 2019, the sale of the Vodafone Disposal Group in July 2019, the Sunrise Acquisition in November 2020 and the pending sale of UPC Poland (each as defined and described in note 5 to our combined financial statements included in Part II of this annual report). Our ability to complete any transaction may be limited by many factors, including government regulation, availability of financing, our or our counterparty's debt covenants, the prevalence of complex ownership structures among potential targets, acquirers, or partners, disapproval by shareholders of potential targets or acquirers, and competition from other potential acquirers, including private equity funds. Even if we are successful in completing such transactions, integration and separation activities may present significant costs and challenges. We cannot be assured that we will be successful with respect to acquisitions, dispositions, partnerships or other similar transactions or realizing the anticipated benefits thereof. In addition, while we intend to conduct appropriate due diligence and to implement appropriate controls and procedures as we integrate acquired companies, we may not be able to certify as to the effectiveness of these companies' disclosure controls and procedures or internal controls over financial reporting until we have fully integrated them.

The expected synergies and benefits from our acquisitions may not be realized in the amounts anticipated or may not be realized within the expected time frame, and risks associated with the foregoing may also result from the extended delay in the integration of the companies. Our ability to realize the anticipated benefits of our acquisitions will depend, to a large extent, on our ability to integrate our businesses and the acquired business in a manner that facilitates growth opportunities and achieves the projected cost savings. In addition, some of the anticipated synergies are not expected to occur for some time following the completion of such acquisitions and will require substantial capital expenditures before realizing some of those synergies.

The COVID-19 pandemic may delay, reduce or eliminate some of our anticipated synergies and other benefits, including a delay in the integration of, or inability to integrate, the business that we acquire or partner with. Even if we are able to integrate successfully, the anticipated benefits of such transactions, including the expected synergies and network benefits, may not be realized fully or at all or may take longer to realize than expected.

We have incurred substantial expenses as a result of completing our various acquisitions. We expect that substantial additional expenses will need to be incurred in order to integrate the businesses, operations, policies, and procedures. While we have assumed that a certain level of transaction-related expenses will be incurred, factors beyond our control could affect the total amount or the timing of these expenses. Many of the expenses that will be incurred, by their nature, are difficult to estimate accurately. These expenses could exceed the costs historically borne by us and offset, in whole or in part, the expected synergies.

Our integration efforts may not be executed successfully, or such integration may be more difficult, time consuming or costly than expected. Operating costs, customer loss and business disruption, including maintaining relationships with employees, customers, suppliers or vendors, may be greater than expected. The combination of independent businesses is complex, costly and time-consuming, and may divert significant management attention and resources. This process may disrupt our business or otherwise impact our ability to compete. The overall combination of our and the businesses of those companies that we acquire or partner with may also result in material unanticipated problems, expenses, liabilities, competitive responses and impacts and loss of customers and other business relationships. The difficulties of combining the operations of the companies include, among others:

- diversion of management attention to integration matters;
- difficulties in integrating operations and systems, including intellectual property and communications systems, administrative and information technology infrastructure, and supplier and vendor arrangements, including as a result of the COVID-19 pandemic;
- challenges in conforming standards, controls, procedures and accounting and other policies;
- alignment of key performance measurements may result in a greater need to communicate and manage clear expectations while we work to integrate and align policies and practices;
- difficulties in integrating employees;
- the transition of management to the combined company management team, and the need to address possible differences in corporate cultures, management philosophies, and compensation structures;
- challenges in retaining existing customers and obtaining new customers;
- compliance with government regulations
- known or potential unknown liabilities of the acquired businesses that are larger than expected; and
- other potential adverse consequences and unforeseen increased expenses or liabilities associated with the applicable transaction.

Additionally, uncertainties over the integration process could cause customers, suppliers, distributors, dealers, retailers and others to seek to change or cancel our existing business relationships or to refuse to renew existing relationships. Suppliers, distributors and content and application providers may also delay or cease developing new products for us that are necessary for the operations of our business due to uncertainties or lack of available resources. Competitors may also target our existing customers by highlighting potential uncertainties and integration difficulties.

Some of these factors are outside our control, and any one of them could result in lower revenues, higher costs and diversion of management time and energy, which could adversely impact our business, financial condition and operating results. In addition, even if the integration is successful, the full benefits of our acquisitions including, among others, the synergies, cost savings or sales or growth opportunities may not be realized. As a result, it cannot be assured that we will realize the full benefits expected from such transactions within the anticipated time frames or at all.

We may have exposure to additional tax liabilities. We are subject to income taxes as well as non-income based taxes, such as value-added taxes (VAT) or similar revenue based taxes. In addition, most tax jurisdictions in which we operate have complex and subjective rules regarding the valuation of intercompany services, cross-border payments between affiliated companies and the related effects on income tax, VAT and transfer tax. Significant judgment is required in determining our worldwide provision for income taxes and other tax liabilities. In the ordinary course of our business, there are many transactions and calculations where the ultimate tax determination is uncertain. We are regularly under audit by tax authorities in many of the jurisdictions in which we operate. These audits may lead to disputes with tax authorities, which may result in litigation. Although we believe that our tax estimates are reasonable, any material differences as a result of final determinations of tax audits or tax disputes could have an adverse effect on our financial position and results of operations in the period or periods for which determination is made.

We are subject to changing tax laws, treaties and regulations in and between countries in which we operate. Also, various income tax proposals in the jurisdictions in which we operate could result in changes to the existing laws on which our deferred taxes are calculated. A change in these tax laws, treaties or regulations, or in the interpretation thereof, could result in a materially higher income or non-income tax expense, and any such material changes could cause a material change in our

effective tax rate. In this regard, there have been significant changes or proposed changes to the tax laws in numerous jurisdictions in which we operate, the impacts of which have been reflected accordingly in our combined financial statements.

Further changes in the tax laws of the foreign jurisdictions in which we operate could arise as a result of the Base Erosion and Profit Shifting (BEPS) project undertaken by the Organizational Economic Cooperation and Development (OECD). The OECD represents a coalition of member countries that encompass most of the jurisdictions in which we operate. In October 2021, the OECD announced the OECD/G20 Inclusive Framework of Base Erosion and Profit Shifting (the Framework), which agreed to a two-pillar solution to reform international taxation. Pillar One provides a mechanism to align taxing rights more closely with local market engagement; generally, where people or consumers are located. Pillar Two establishes a global minimum tax regime through a series of interlocking rules that would apply when a country's income tax rate is below 15%. The Framework targets a 2023 effective date for most aspects of both pillars, with OECD and G2 members enacting laws consistent with Pillar Two in 2022. It is possible that jurisdictions in which we do business could react to the BEPS initiatives or their own concerns by enacting tax legislation that could adversely affect our financial position through increasing our tax liabilities. Further, the BEPS project, as well as legislative changes in many countries, has resulted in various initiatives that require the sharing of company financial and operational information with taxing authorities on a local or global basis. This may lead to greater audit scrutiny of profits earned in other countries as well as disagreements between jurisdictions associated with the proper allocation of profits between jurisdictions.

Risks Relating to Certain Financial Matters

We have substantial indebtedness that may have a material adverse effect on our available cash flow, our ability to obtain additional financing in the future, if necessary, our flexibility in reacting to competitive technological changes and our operations. We have a substantial amount of indebtedness. At December 31, 2021, the outstanding principal amount of our combined third-party debt, together with the present value of our finance lease obligations, aggregated 66,611.6 million, including 6273.3 million that is classified as current on our combined balance sheet and 66,330.3 million that is not due until 2027 or thereafter. We believe that we have sufficient resources to repay or refinance the current portion of our debt and finance lease obligations and to fund our foreseeable liquidity requirements during the next 12 months. However, as our maturing debt grows in later years, we anticipate that we will seek to refinance or otherwise extend our debt maturities. In this regard, we completed refinancing transactions during 2021 that, among other things, resulted in the extension of certain of our combined entities' debt maturities. Our ability to pay principal and interest on or to refinance our outstanding indebtedness depends upon our operating performance, which will be affected by, among other things, general economic, financial, competitive, regulatory and other factors, some of which are beyond our control. Moreover, we may not be able to refinance or redeem such debt on commercially reasonable terms, on terms acceptable to us, or at all.

The level of our indebtedness could have important consequences, including the following:

- a substantial portion of our cash flows from operations will have to be dedicated to the payment of interest and principal on existing indebtedness, thereby reducing the funds available for other purposes;
- our ability to obtain additional financing in the future for working capital, capital expenditures, product development, acquisitions or general corporate purposes may be impaired;
- our flexibility in planning for, or reacting to, changes in our business, the competitive environment and the industry in which we operate, and to technological and other changes may be limited;
- we may be placed at a competitive disadvantage as compared to our competitors that are not as highly leveraged;
- our substantial degree of leverage could make us more vulnerable in the event of a downturn in general economic conditions or adverse developments in our business; and
- we are exposed to risks inherent in interest rate and foreign exchange rate fluctuations.

Any of these or other consequences or events could have a material adverse impact on our ability to satisfy our debt obligations, which could adversely affect our business and operations.

We may not be able to fund our debt service obligations in the future. We have significant outstanding indebtedness that could require a partial or comprehensive refinancing in future periods. For additional information regarding our debt maturities, see note 9 to our combined financial statements included in Part II of this annual report. Our ability to meet our debt service obligations or to refinance our debt depends on our future operating and financial performance, which will be affected by our ability to successfully implement our business strategy as well as general economic, financial, competitive, regulatory and other

factors beyond our control. If we cannot generate sufficient cash to meet our debt service requirements, we may be forced to raise cash or reduce expenses by doing one or more of the following:

- raising additional debt;
- restructuring or refinancing our indebtedness prior to maturity and/or on unfavorable terms;
- selling or disposing of some of our assets, possibly on unfavorable terms;
- issuing equity or equity-related instruments that will dilute the equity ownership interest of existing stockholders; or
- foregoing business opportunities, including the introduction of new products and services, acquisitions and joint ventures.

We cannot be sure that any of, or a combination of, the above actions would be sufficient to fund our debt service obligations, particularly in times of turbulent capital markets. If we are not able to refinance any of our debt, obtain additional financing or sell assets on commercially reasonable terms or at all, we may not be able to satisfy our debt obligations.

The covenants under our debt agreements place certain limitations on our ability to finance future operations and how we manage our business. The agreements that govern our indebtedness contain financial maintenance tests and restrictive covenants that restrict our ability to incur additional debt and limit the discretion of our management over various business matters. For example, the financial maintenance tests include leverage ratios, and the restrictive covenants impact our ability to:

- pay dividends or make other distributions, or redeem or repurchase equity interests or subordinated obligations;
- make investments;
- sell assets, including the capital stock of certain entities;
- enter into certain sale and leaseback transactions and certain vendor financing arrangements;
- create liens:
- enter into agreements that restrict the ability of certain of our entities to pay dividends, transfer assets or make relatedparty loans;
- merge or consolidate or transfer all or substantially all of our assets; and
- enter into certain transactions with affiliates.

These limitations are subject to significant exceptions and qualifications, including the ability to pay dividends, make investments or make significant prepayments of shareholder debt. However, these covenants could limit our ability to finance our future operations and capital needs and our ability to pursue business opportunities and activities that may be in our interest. In addition, our ability to comply with the provisions of our debt instruments may be affected by events beyond our control.

If we breach any of these covenants, or are unable to comply with the required financial ratios or if the drawings under the revolving credit facility exceed a certain percentage of the commitments under such revolving credit facility, we may be in default under our debt instruments. Upon the occurrence of a default, a significant portion of our indebtedness may then become immediately due and payable and we may not have sufficient assets to repay amounts due thereunder. In addition, any default under any one of our debt facilities or instruments could lead to an event of default and acceleration under other debt instruments that contain cross default or cross acceleration provisions, including the indentures governing the Senior Notes issued by us.

These restrictions could also materially adversely affect our ability to finance future operations or capital needs or to engage in other business activities that may be in our best interest. We may also incur other indebtedness in the future that may contain financial or other covenants more restrictive than those applicable under our current indebtedness.

We are a holding company dependent upon cash flows from our operations to meet our obligations. UPC Holding and a number of our combined entities are holding companies with no independent operations or significant assets other than investments in their subsidiaries. Each of these holding companies depends upon the receipt of sufficient funds from our operating entities to meet its obligations. The terms of our senior credit facility and other indebtedness limit the payment of dividends, loan repayments and other distributions to or from these holding companies under certain circumstances. Various agreements governing our debt may restrict and, in some cases, may also prohibit the ability of these entities to move cash within their restricted group. Applicable tax laws may also subject such payments to further taxation or may limit the amounts

that some of our combined entities will be permitted to pay as dividends or distributions on their equity interests or as loans, or even prevent such payments.

We are exposed to interest rate risks. Shifts in such rates may adversely affect our debt service obligations. We are exposed to the risk of fluctuations in interest rates, primarily under the UPC Holding Bank Facility, which are indexed to EURIBOR, LIBOR, or other base rates. Although we enter into various derivative transactions to manage exposure to movements in interest rates, there can be no assurance that we will be able to continue to do so at a reasonable cost or at all. If we are unable to effectively manage our interest rate exposure through derivative transactions, any increase in market interest rates would increase our interest rate exposure and debt service obligations, which would exacerbate the risks associated with our leveraged capital structure.

In July 2017, the U.K. Financial Conduct Authority (the authority that regulates LIBOR) announced that it intends to stop compelling banks to submit rates for the calculation of LIBOR after 2021. Additionally, the European Money Markets Institute (the authority that administers EURIBOR) announced that measures would need to be undertaken by the end of 2021 to reform EURIBOR to ensure compliance with the E.U. Benchmarks Regulation. In November 2020, ICE Benchmark Administration (the entity that administers LIBOR) announced its intention to continue publishing USD LIBOR rates until June 30, 2023, with the exception of the one-week and two-month rates which, along with all CHF and GBP LIBOR rates, it ceased to publish after December 31, 2021. While this extension allows additional runway on existing contracts using USD LIBOR rates, companies are still encouraged to transition away from using USD LIBOR as soon as practicable and should not enter into new contracts that use USD LIBOR after 2021. The methodology for EURIBOR has been reformed and EURIBOR has been granted regulatory approval to continue to be used. Currently, there is no consensus amongst loan borrowers and investors for what rate(s) should replace USD LIBOR.

In October 2020, the International Swaps and Derivatives Association (the ISDA) launched the Fallback Supplement, which, as of January 25, 2021, amended the standard definitions for interest rate derivatives to incorporate fallbacks for derivatives linked to certain key interbank offered rates (IBORs). The ISDA also launched the Fallback Protocol, a protocol that enables market participants to incorporate these revisions into their legacy non-cleared derivatives with other counterparties that choose to adhere to the protocol. The fallbacks for a particular currency apply following a permanent cessation of the IBOR in that currency, or in the case of a LIBOR setting, that LIBOR setting becoming permanently unrepresentative, and are adjusted versions of the risk-free rates identified in each currency. Our credit agreements contain provisions that contemplate alternative calculations of the base rate applicable to our LIBOR-indexed and EURIBOR-indexed debt to the extent LIBOR or EURIBOR (as applicable) are not available, which alternative calculations we do not anticipate will be materially different from what would have been calculated under LIBOR or EURIBOR (as applicable). Additionally, no mandatory prepayment or redemption provisions would be triggered under our credit agreements in the event that either the LIBOR rate or the EURIBOR rate is not available. It is possible, however, that any new reference rate that applies to our LIBOR-indexed or EURIBORindexed debt could be different from any new reference rate that applies to our LIBOR-indexed or EURIBOR-indexed derivative instruments. For discontinued currencies and tenors, we expect to continue taking steps to mitigate the changes in these benchmark rates, including by amending existing credit agreements and adhering to the Fallback Protocol, where appropriate. We plan to continue to manage this difference and any resulting increased variable-rate exposure through modifications to our debt and/or derivative instruments, however future market conditions may not allow immediate implementation of desired modifications and our subsidiaries may incur significant associated costs.

We are subject to increasing operating costs and inflation risks which may adversely affect our results of operations. While our operations attempt to increase our subscription rates to offset increases in programming and operating costs, there is no assurance that they will be able to do so. In certain countries in which we operate, our ability to increase subscription rates is subject to regulatory controls. Also, our ability to increase subscription rates may be constrained by competitive pressures. Therefore, programming and operating costs may rise faster than associated revenue, resulting in a material negative impact on our cash flows and results of operations. We are also impacted by inflationary increases in salaries, wages, benefits and other administrative costs in certain of our markets. In this regard, inflation rates in the countries in which we operate have recently increased.

Continuing uncertainties and challenging conditions in the global economy and in the countries in which we operate may adversely impact our business, financial condition and results of operations. The current macroeconomic environment is highly volatile, and continuing instability in global markets, including ongoing trade negotiations, uncertainty over inflation and energy price fluctuations, have contributed to a challenging global economic environment. Future developments are dependent upon a number of political and economic factors, including the additional borrowing incurred by countries in Europe since the start of the pandemic and the potential for low growth as social restrictions are lifted. As a result, we cannot predict how long challenging conditions will exist or the extent to which the markets in which we operate may deteriorate. Additional risks

arising from the ongoing economic challenges in Europe are described below under the risk factor titled: We are exposed to sovereign debt and currency instability risks that could have an adverse impact on our liquidity, financial condition and cash flows.

Unfavorable economic conditions may impact a significant number of our subscribers and/or the prices our combined entities are able to charge for their products and services, and, as a result, it may be (i) more difficult for us to attract new subscribers, (ii) more likely that subscribers will downgrade or disconnect their services and (iii) more difficult for us to maintain ARPUs at existing levels. Countries may also seek new or increased revenue sources due to fiscal deficits. Such actions may further adversely affect us. Accordingly, our ability to increase, or, in certain cases, maintain, the revenue, ARPUs, customers, mobile subscribers, Segment Adjusted EBITDA, Segment Adjusted EBITDA margins and liquidity of our operating segments could be adversely affected if the macroeconomic environment remains uncertain or declines further. We are currently unable to predict the extent of any of these potential adverse effects.

We are exposed to sovereign debt and currency instability risks that could have an adverse impact on our liquidity, financial condition and cash flows. Our operations are subject to macroeconomic and political risks that are outside of our control. For example, high levels of sovereign debt in some countries in which we operate, combined with weak growth and high unemployment, could potentially lead to fiscal reforms (including austerity measures), tax increases, sovereign debt restructurings, high corporate default rates, currency instability, increased counterparty credit risk, high levels of volatility and disruptions in the credit and equity markets, as well as other outcomes that might adversely impact us. With regard to currency instability issues, concerns exist in the eurozone with respect to individual macro-fundamentals on a country-by-country basis, as well as with respect to the overall stability of the European monetary union and the suitability of a single currency to appropriately deal with specific fiscal management and sovereign debt issues in individual eurozone countries. The realization of these concerns could lead to the exit of one or more countries from the European monetary union and the re-introduction of individual currencies in these countries, or, in more extreme circumstances, the possible dissolution of the European monetary union entirely, which could result in the redenomination of a portion or, in the extreme case, all of our euro-denominated assets, liabilities and cash flows to the new currency of the country in which they originated. This could result in a mismatch in the currencies of our assets, liabilities and cash flows. Any such mismatch, together with the capital market disruption that would likely accompany any such redenomination event, could have a material adverse impact on our liquidity and financial condition. Furthermore, any redenomination event would likely be accompanied by significant economic dislocation, particularly within the eurozone countries, which in turn could have an adverse impact on demand for our products and services, and accordingly, on our revenue and cash flows. Moreover, any changes from euro to non-euro currencies within the European countries in which we operate would require us to modify our billing and other financial systems. No assurance can be given that any required modifications could be made within a time frame that would allow us to timely bill our customers or prepare and file required financial reports. In light of the significant exposure that we have to the euro through our euro-denominated borrowings, derivative instruments, cash balances and cash flows, a redenomination event could have a material adverse impact on us.

We may not freely access the cash of our operating companies. Our operations are conducted through our operating entities. Our current sources of corporate liquidity include (i) our cash and cash equivalents and (ii) interest and dividend income received on our cash and cash equivalents and investments. From time to time, we also receive (a) proceeds in the form of distributions or loan repayments from our operating entities or affiliates, (b) proceeds upon the disposition of investments and other assets and (c) proceeds in connection with the incurrence of debt. The ability of our operating entities to pay dividends or to make other payments or advances to us depends on their individual operating results and any statutory, regulatory or contractual restrictions to which they may be or may become subject and in some cases our receipt of such payments or advances may be limited due to tax considerations or the presence of noncontrolling interests. Most of our operating entities are subject to credit agreements or indentures that restrict sales of assets and prohibit or limit the payment of dividends or the making of distributions, loans or advances to shareholders and partners, including us. In addition, because these operating entities are separate and distinct legal entities they have no obligation to provide us funds for payment obligations, whether by dividends, distributions, loans or other payments.

We are exposed to the risk of default by the counterparties to our cash investments, derivative and other financial instruments, and undrawn debt facilities. Although we seek to manage the credit risks associated with our cash investments, derivative and other financial instruments, and undrawn debt facilities, we are exposed to the risk that our counterparties will default on their obligations to us. While we regularly review our credit exposures and currently have no specific concerns about the creditworthiness of any counterparty for which we have material credit risk exposures, we cannot rule out the possibility that one or more of our counterparties could fail or otherwise be unable to meet its obligations to us. Any such instance of default or failure could have an adverse effect on our cash flows, results of operations, financial condition and/or liquidity. In this regard, (i) we may incur losses to the extent that we are unable to recover debts owed to us, including cash deposited and

the value of financial losses, (ii) we may incur significant costs to recover amounts owed to us, and such recovery may take a long period of time or may not be possible at all, (iii) our derivative liabilities may be accelerated by the default of our counterparty, (iv) we may be exposed to financial risks as a result of the termination of affected derivative contracts, and it may be costly or impossible to replace such contracts or otherwise mitigate such risks, (v) amounts available under committed credit facilities may be reduced and (vi) disruption to the credit markets could adversely impact our ability to access debt financing on favorable terms, or at all.

At December 31, 2021, our exposure to counterparty credit risk included (i) derivative assets with an aggregate fair value of €39.8 million, (ii) cash and cash equivalents and restricted cash balances of €17.8 million and (iii) aggregate undrawn debt facilities of €715.2 million. For additional information regarding our derivative instruments, see note 6 to our combined financial statements included in Part II of this annual report.

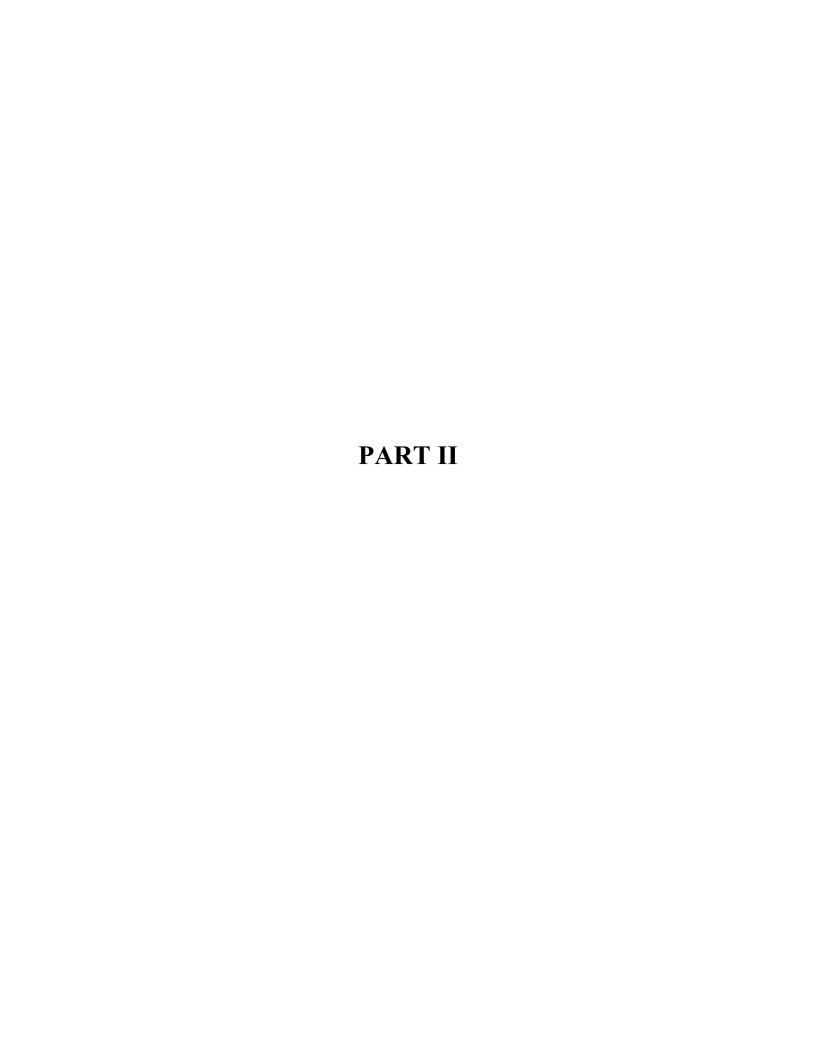
We may not report net earnings. We reported net earnings (loss) attributable to parent entities of \in 8.2 million, (\in 262.6 million) and (\in 64.2 million) during the years ended December 31, 2021, 2020 and 2019, respectively. In light of our historical financial performance and the impact of recent transactions, we cannot assure you that we will report net earnings in the near future or ever.

Other Risks

The loss of certain key personnel could harm our business. We have experienced employees at both the corporate and operational levels who possess substantial knowledge of our business and operations. We cannot assure you that we will be successful in retaining their services or that we would be successful in hiring and training suitable replacements without undue costs or delays. As a result, the loss of any of these key employees could cause significant disruptions in our business operations, which could materially adversely affect our results of operations.

The interests of Liberty Global, our indirect parent company or companies, as the case may be, may conflict with our interests and this could adversely affect our business. Liberty Global is our parent, indirectly owning all of the voting interests in the UPC Holding Group. When business opportunities, or risks and risk allocation arise, the interests of Liberty Global (or other Liberty Global controlled entities) may be different from, or in conflict with, our interests on a stand-alone basis. Because we are indirectly controlled by the parent entity, Liberty Global may allocate certain or all of its risks to us and there can be no assurance that Liberty Global will permit us to pursue certain business opportunities.

We are exposed to the risks arising from widespread epidemic diseases in the countries in which we operate, such as the outbreak of COVID-19, which could have a material adverse impact on our business, financial condition and results of operations. The COVID-19 pandemic and the emergency measures imposed by governments worldwide, including travel restrictions, restrictions on social activity and the shutdown of non-essential businesses have adversely impacted the global economy, disrupted global supply chains and created significant volatility and disruption of financial markets. While it is not currently possible to estimate the duration and severity of the COVID-19 pandemic or the adverse economic impact resulting from the preventative measures taken to contain or mitigate its outbreak, an extended period of global economic disruption could have a material adverse impact on our business, financial condition and results of operations in future periods. We may also be adversely impacted by any government mandated regulations on our business that could be implemented in response to the COVID-19 pandemic. In addition, countries may seek new or increased revenue sources due to fiscal deficits that result from measures taken to mitigate the adverse economic impacts of COVID-19, such as by imposing new taxes on the products and services we provide. We are currently unable to predict the extent of any of these potential adverse effects.





KPMG LLP Suite 800 1225 17th Street Denver, CO 80202-5598

Independent Auditors' Report

The Board of Directors
The UPC Holding Group:

Report on the Audit of the Combined Financial Statements

Opinion

We have audited the combined financial statements of The UPC Holding Group and its subsidiaries (the Holding Group), as defined in note 1 of the combined financial statements, which comprise the combined balance sheets as of December 31, 2021 and 2020 and the related combined statements of operations, comprehensive earnings (loss), equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2021, and the related notes to the combined financial statements.

In our opinion, the accompanying combined financial statements present fairly, in all material respects, the financial position of the Holding Group as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2021 in accordance with U.S. generally accepted accounting principles.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Combined Financial Statements section of our report. We are required to be independent of the Holding Group and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Combined Financial Statements

Management is responsible for the preparation and fair presentation of the combined financial statements in accordance with U.S. generally accepted accounting principles, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of combined financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the combined financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Holding Group's ability to continue as a going concern for one year after the date that the combined financial statements are issued.



Auditors' Responsibilities for the Audit of the Combined Financial Statements

Our objectives are to obtain reasonable assurance about whether the combined financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the combined financial statements.

In performing an audit in accordance with GAAS, we:

- · Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the combined financial statements, whether
 due to fraud or error, and design and perform audit procedures responsive to those risks. Such
 procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the
 combined financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that
 are appropriate in the circumstances, but not for the purpose of expressing an opinion on the
 effectiveness of the Holding Group's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the combined financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Holding Group's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

KPMG LLP

Denver, Colorado March 15, 2022

The UPC Holding Group COMBINED BALANCE SHEETS

| | | December 31, | | |
|---|---|--------------|--------|----------|
| | | 2021 2020 | | 2020 |
| | | in mi | illion | 18 |
| ASSETS | | | | |
| Current assets: | | | | |
| Cash and cash equivalents | € | 16.9 | € | 25.7 |
| Trade receivables, net (note 13) | | 408.7 | | 551.2 |
| Related-party receivables (note 13) | | 8.5 | | 17.3 |
| Derivative instruments (note 6) | | 152.3 | | 74.7 |
| Current assets of discontinued operations (note 5) | | 814.1 | | 802.7 |
| Other current assets (note 4) | | 334.7 | | 134.6 |
| Total current assets | | 1,735.2 | | 1,606.2 |
| | | | | |
| Related-party receivables (note 13) | | 73.6 | | |
| Property and equipment, net (notes 8 and 10) | | 2,585.5 | | 2,439.3 |
| Goodwill (note 8) | | 5,844.6 | | 5,631.8 |
| Intangible assets subject to amortization, net (note 8) | | 1,807.6 | | 2,070.2 |
| Derivative instruments (note 6) | | 101.4 | | 283.7 |
| Operating lease right-of-use (ROU) assets (note 10) | | 979.1 | | 989.2 |
| Other assets, net (notes 4, 10, 11 and 13) | | 283.1 | | 282.9 |
| Total assets | € | 13,410.1 | € | 13,303.3 |

The UPC Holding Group COMBINED BALANCE SHEETS — (Continued)

| | | December 31, | | <u> </u> | |
|--|---|--------------|---|----------|--|
| | | 2021 | | 020 | |
| LIA DIL ITIES AND COMPINED FOURTY | | in millio | | ons | |
| LIABILITIES AND COMBINED EQUITY | | | | | |
| Current liabilities: | | | | | |
| Accounts payable (note 13) | | 245.8 | € | 174.7 | |
| Deferred revenue (note 4) | | 84.0 | | 195.3 | |
| Derivative instruments (note 6) | | 131.8 | | 76.4 | |
| Current portion of debt and finance lease obligations (notes 9 and 10) | | 273.3 | | 279.3 | |
| Current operating lease liabilities (note 10) | | 71.4 | | 102.3 | |
| Accrued capital expenditures | | 85.4 | | 77.3 | |
| Current liabilities of discontinued operations (note 5) | | 175.6 | | 189.1 | |
| Other accrued and current liabilities: | | | | | |
| Third-party | | 398.5 | | 385.1 | |
| Related-party (note 13) | | 57.8 | | 69.8 | |
| Total current liabilities | | 1,523.6 | | 1,549.3 | |
| | | | | | |
| Long-term debt and finance lease obligations (notes 9, 10 and 13) | | 6,306.4 | | 6,069.6 | |
| Derivative instruments (note 6) | | 414.6 | | 605.3 | |
| Long-term operating lease liabilities (note 10) | | 921.9 | | 868.7 | |
| Other long-term liabilities (notes 4, 11, 13 and 14) | | 423.8 | | 535.7 | |
| Total liabilities | | 9,590.3 | | 9,628.6 | |
| Commitments and contingencies (notes 6, 9, 11, 14 and 16) | | | | • | |
| Combined equity (notes 12 and 15): | | | | | |
| Parent entities: | | | | | |
| Contributions and accumulated earnings in excess of distributions | | 2,843.3 | | 2,842.5 | |
| Accumulated other comprehensive earnings, net of taxes | | 959.4 | | 815.0 | |
| Total combined equity attributable to parent entities | _ | 3,802.7 | | 3,657.5 | |
| Noncontrolling interests | | 17.1 | | 17.2 | |
| Total combined equity | | 3,819.8 | | 3,674.7 | |
| Total liabilities and combined equity | | 13,410.1 | | 3,303.3 | |
| 1 3 | Ě | -, | | - , | |

The UPC Holding Group COMBINED STATEMENTS OF OPERATIONS

| | | Year | oer 31, | | | |
|--|---|---------|---------|----------|---|---------|
| | | 2021 | | 2020 | | 2019 |
| | | | in | millions | | |
| Revenue (notes 4, 13 and 17) | € | 2,852.1 | € | 1,409.6 | € | 1,168.7 |
| Operating costs and expenses (exclusive of depreciation and amortization, shown separately below): | | | | | | |
| Programming and other direct costs of services (note 13) | | 906.6 | | 367.2 | | 244.8 |
| Other operating (note 13) | | 351.2 | | 193.2 | | 169.7 |
| Selling, general and administrative (SG&A) (note 13) | | 575.0 | | 247.7 | | 198.2 |
| Related-party fees and allocations, net (note 13) | | 160.1 | | 163.3 | | 122.0 |
| Depreciation and amortization (note 8) | | 880.5 | | 352.9 | | 248.8 |
| Impairment, restructuring and other operating items, net (notes 5 and 14) | | (56.1) | | 44.6 | | 11.7 |
| | | 2,817.3 | | 1,368.9 | | 995.2 |
| Operating income | | 34.8 | | 40.7 | | 173.5 |
| Non-operating income (expense): | | | | | | |
| Interest expense (note 13) | | (253.7) | | (168.9) | | (268.5) |
| Realized and unrealized gains (losses) on derivative instruments, net (note 6) | | 180.4 | | (264.1) | | 27.5 |
| Foreign currency transaction gains (losses), net | | 26.6 | | 140.6 | | (74.7) |
| Losses on debt extinguishment, net (note 9) | | (75.1) | | (40.5) | | (13.8) |
| Other income, net (note 13) | | 30.7 | | 19.9 | | 19.7 |
| | | (91.1) | | (313.0) | | (309.8) |
| Loss from continuing operations before income taxes | | (56.3) | | (272.3) | | (136.3) |
| Income tax benefit (expense) (note 11) | | 44.5 | | 29.5 | | (28.5) |
| Loss from continuing operations | | (11.8) | | (242.8) | | (164.8) |
| Discontinued operations (note 5): | | | | | | |
| Earnings (loss) from discontinued operations, net of taxes | | 23.0 | | (16.7) | | 102.4 |
| Gain on disposal of discontinued operation, net of taxes | | _ | | _ | | 1.9 |
| | | 23.0 | | (16.7) | | 104.3 |
| Net earnings (loss) | | 11.2 | | (259.5) | | (60.5) |
| Net earnings attributable to noncontrolling interests | | (3.0) | | (3.1) | | (3.7) |
| Net earnings (loss) attributable to parent entities | € | 8.2 | € | (262.6) | € | (64.2) |

The UPC Holding Group COMBINED STATEMENTS OF COMPREHENSIVE EARNINGS (LOSS)

| | Year ended December 31, | | | | | |
|---|-------------------------|-------|---|-----------|--------|--|
| | | 2021 | | 2020 | 2019 | |
| | | | | | | |
| Net earnings (loss) | € | 11.2 | € | (259.5) € | (60.5) | |
| Other comprehensive earnings (loss), net of taxes (note 15): | | 11.2 | | (237.3) | (00.3) | |
| Continuing operations: | | | | | | |
| Foreign currency translation adjustments | | 107.4 | | 10.7 | 87.3 | |
| Pension-related adjustments and other | | 38.0 | | (17.3) | (2.9) | |
| Other comprehensive earnings (loss) from continuing operations | | 145.4 | | (6.6) | 84.4 | |
| Other comprehensive earnings (loss) from discontinued operations (note 5) | | (1.0) | | (51.3) | 5.0 | |
| Other comprehensive earnings (loss) | | 144.4 | | (57.9) | 89.4 | |
| Comprehensive earnings (loss) | | 155.6 | | (317.4) | 28.9 | |
| Comprehensive earnings attributable to noncontrolling interests | | (3.0) | | (3.1) | (3.7) | |
| Comprehensive earnings (loss) attributable to parent entities | € | 152.6 | € | (320.5) € | 25.2 | |

The UPC Holding Group COMBINED STATEMENTS OF EQUITY (DEFICIT)

| | | Parent entities | | | |
|---|--|--|---|----------------------------------|--|
| | Contributions and accumulated earnings in excess of distributions | Accumulated other comprehensive earnings, net of taxes | Total combined equity (deficit) attributable to parent entities in millions | Non- controlling interests | Total combined equity (deficit) |
| Balance at January 1, 2019 | € (1,738.4) | € 783.5 | € (954.9) | € 18.6 | € (936.3) |
| Net loss | | _ | (64.2) | 3.7 | (60.5) |
| Other comprehensive earnings, net of taxes (note 15) | _ | 89.4 | 89.4 | _ | 89.4 |
| Distribution in connection with the UPC Transfers (notes 5 and 12) | 1,692.4 | _ | 1,692.4 | | 1,692.4 |
| Conversion of the Shareholder Loan to equity (note 13) | 1,642.2 | _ | 1,642.2 | _ | 1,642.2 |
| Distribution in connection with the Vodafone Group Distribution and the UPC DTH Distribution (notes 5 and 12) | (1,376.1) | _ | (1,376.1) | _ | (1,376.1) |
| Share-based compensation (note 13) | 17.0 | _ | 17.0 | _ | 17.0 |
| Deemed contribution of technology-related services (notes 12 and 13) | 12.6 | _ | 12.6 | _ | 12.6 |
| Capital charge in connection with the exercise or vesting of share-based incentive awards (note 13) | (10.9) | _ | (10.9) | _ | (10.9) |
| Deemed contribution from other subsidiaries of Liberty Global (note 12) | 9.8 | _ | 9.8 | _ | 9.8 |
| Other, net | (27.1) | _ | (27.1) | (4.0) | (31.1) |
| Balance at December 31, 2019 | € 157.3 | € 872.9 | € 1,030.2 | € 18.3 | € 1,048.5 |

The UPC Holding Group COMBINED STATEMENTS OF EQUITY (DEFICIT) — (Continued)

| | | Parent entities | | | |
|---|--|--|---|----------------------------------|-----------------------------|
| | Contributions and accumulated earnings in excess of distributions | Accumulated other comprehensive earnings, net of taxes | Total combined equity attributable to parent entities | Non- controlling interests | Total combined equity |
| | | | in millions | | |
| Balance at January 1, 2020 | € 157.3 | € 872.9 | € 1,030.2 | € 18.3 | € 1,048.5 |
| Net loss | (262.6) | _ | (262.6) | 3.1 | (259.5) |
| Other comprehensive loss, net of taxes (note 15) | _ | (57.9) | (57.9) | _ | (57.9) |
| Capital contribution from other Liberty Global subsidiaries (notes 5 and 12) | 3,092.5 | _ | 3,092.5 | _ | 3,092.5 |
| Technology-related transfer pricing transition fee (note 13) | (204.6) | _ | (204.6) | _ | (204.6) |
| Deemed contribution of technology-related services (notes 12 and 13) | 46.1 | _ | 46.1 | _ | 46.1 |
| Share-based compensation (note 13) | 16.8 | _ | 16.8 | _ | 16.8 |
| Deemed contribution from other subsidiaries of Liberty Global (note 12) | 8.3 | _ | 8.3 | _ | 8.3 |
| Capital charge in connection with the exercise or vesting of share-based incentive awards (note 13) | (5.4) | _ | (5.4) | _ | (5.4) |
| Capital charge for technology-related services (note 13) | (4.3) | | (4.3) | | (4.3) |
| Other, net | (1.6) | _ | (1.6) | (4.2) | (5.8) |
| Balance at December 31, 2020 | € 2,842.5 | € 815.0 | € 3,657.5 | € 17.2 | € 3,674.7 |

The UPC Holding Group COMBINED STATEMENTS OF EQUITY (DEFICIT) — (Continued)

| | | | Par | ent entities | | | | | | |
|---|--|---------|-----|--|------|---------|-------------------------------|-------|----------------------------|---------|
| | Contributions and accumulated earnings in excess of distributions | | | d Accumulated combined ulated other equity ags in comprehensive attributable is of earnings, to parent | | cor | Non- ntrolling nterests | c | Total ombined equity | |
| | | | | | in m | illions | | | | |
| Balance at January 1, 2021 | € | 2,842.5 | € | 815.0 | € | 3,657.5 | € | 17.2 | € | 3,674.7 |
| Net earnings | | 8.2 | | _ | | 8.2 | | 3.0 | | 11.2 |
| Other comprehensive earnings, net of taxes (note 15) | | _ | | 144.4 | | 144.4 | | _ | | 144.4 |
| Capital charge in connection with the exercise or vesting of share-based incentive awards (note 13) | | (18.3) | | _ | | (18.3) | | | | (18.3) |
| Share-based compensation (note 13) | | 15.8 | | | | 15.8 | | | | 15.8 |
| Capital charge for technology-related services | | 13.0 | | | | 13.0 | | | | 13.0 |
| (note 13) | | (9.1) | | _ | | (9.1) | | | | (9.1) |
| Other, net | | 4.2 | | _ | | 4.2 | | (3.1) | | 1.1 |
| Balance at December 31, 2021 | € | 2,843.3 | € | 959.4 | € | 3,802.7 | € | 17.1 | € | 3,819.8 |

The UPC Holding Group COMBINED STATEMENTS OF CASH FLOWS

| | Year ended December | | | | | er 31, | | |
|---|---------------------|---------|----|----------|---|---------|--|--|
| | | 2021 | | 2020 | | 2019 | | |
| | | | in | millions | | | | |
| Cash flows from operating activities: | | | | | | | | |
| Net earnings (loss) | € | 11.2 | € | (259.5) | € | (60.5) | | |
| Earnings (loss) from discontinued operations | | 23.0 | | (16.7) | | 104.3 | | |
| Loss from continuing operations | | (11.8) | | (242.8) | | (164.8) | | |
| Adjustments to reconcile loss from continuing operations to net cash provided by operating activities of continuing operations: | | | | | | | | |
| Share-based compensation expense | | 20.9 | | 19.7 | | 20.4 | | |
| Related-party fees and allocations, net | | 160.1 | | 163.3 | | 122.0 | | |
| Depreciation and amortization | | 880.5 | | 352.9 | | 248.8 | | |
| Impairment, restructuring and other operating items, net | | (56.1) | | 44.6 | | 11.7 | | |
| Non-cash interest on related-party loans | | _ | | | | 47.3 | | |
| Amortization of deferred financing costs and non-cash interest | | 6.5 | | 4.4 | | 5.8 | | |
| Realized and unrealized losses (gains) on derivative instruments, net | | (180.4) | | 264.1 | | (27.5) | | |
| Foreign currency transaction losses (gains), net | | (26.6) | | (140.6) | | 74.7 | | |
| Losses on debt extinguishment, net | | 75.1 | | 40.5 | | 13.8 | | |
| Deferred income tax expense (benefit) | | (51.0) | | (32.7) | | 3.5 | | |
| Changes in operating assets and liabilities, net of the effects of acquisitions and dispositions: | | | | | | | | |
| Receivables and other operating assets | | 520.7 | | 325.0 | | 441.8 | | |
| Payables and accruals | | (501.2) | | (373.0) | | (384.8) | | |
| Net cash provided by operating activities of continuing operations | | 836.7 | | 425.4 | | 412.7 | | |
| Net cash provided by operating activities of discontinued operations | | 64.9 | | 65.6 | | 303.6 | | |
| Net cash provided by operating activities | € | 901.6 | € | 491.0 | € | 716.3 | | |

The UPC Holding Group COMBINED STATEMENTS OF CASH FLOWS — (Continued)

| | | Year | end | led Decemb | er 3 | 31, |
|--|---|-----------|-----|------------|------|-----------|
| | | 2021 | | 2020 | | 2019 |
| | | | iı | n millions | | |
| Cash flows from investing activities: | | | | | | |
| Capital expenditures, net | € | (295.3) | € | (151.3) | € | (196.3) |
| Cash paid in connection with acquisitions, net of cash acquired | | (59.0) | | (4,471.2) | | (0.4) |
| Repayments from (advances to) related parties, net | | 53.3 | | (12.0) | | (176.5) |
| Cash received from the settlement of a related-party receivable | | _ | | _ | | 200.5 |
| Other investing activities, net | | 19.3 | | (46.7) | | (74.5) |
| Net cash used by investing activities of continuing operations | | (281.7) | | (4,681.2) | | (247.2) |
| Net cash used by investing activities of discontinued operations | | (44.7) | | (54.3) | | (151.6) |
| Net cash used by investing activities | | (326.4) | | (4,735.5) | | (398.8) |
| | | | | | | |
| Cash flows from financing activities: | | | | | | |
| Repayments and repurchases of third-party debt and finance lease obligations | | (1,532.0) | | (2,750.3) | | (1,609.0) |
| Borrowings of third-party debt | | 1,270.7 | | 4,116.5 | | 73.9 |
| Borrowings (repayments) of related-party debt, net | | (414.6) | | (66.5) | | 1,292.1 |
| Net cash received (paid) related to derivative instruments | | 137.6 | | (45.6) | | 144.2 |
| Capital contributions from other Liberty Global subsidiaries | | _ | | 3,092.5 | | _ |
| Advances to related parties | | _ | | _ | | (200.5) |
| Other financing activities, net | | (18.9) | | (81.2) | | 73.4 |
| Net cash provided (used) by financing activities of continuing operations | | (557.2) | | 4,265.4 | | (225.9) |
| Net cash used by financing activities of discontinued operations | | (28.0) | | (18.3) | | (88.0) |
| Net cash provided (used) by financing activities | € | (585.2) | € | 4,247.1 | € | (313.9) |

The UPC Holding Group COMBINED STATEMENTS OF CASH FLOWS — (Continued)

| | Year ended Decembe | | | | | ber 31, | | |
|---|--------------------|-------|----|----------|---|---------|--|--|
| | | 2021 | | 2020 | | 2019 | | |
| | | | in | millions | | | | |
| Effect of exchange rate changes on cash and cash equivalents and restricted cash: | | | | | | | | |
| Continuing operations | . € | 1.2 | € | 1.0 | € | 5.7 | | |
| Discontinued operations | | _ | | _ | | _ | | |
| Total | | 1.2 | | 1.0 | _ | 5.7 | | |
| Net increase (decrease) in cash and cash equivalents and restricted cash: | | | | | | | | |
| Continuing operations | | (1.0) | | 10.6 | | (54.7) | | |
| Discontinued operations | | (7.8) | | (7.0) | | 64.0 | | |
| Total | | (8.8) | | 3.6 | | 9.3 | | |
| Cash and cash equivalents and restricted cash: | | | | | | | | |
| Beginning of year | | 26.6 | | 23.0 | | 13.7 | | |
| End of year | . € | 17.8 | € | 26.6 | € | 23.0 | | |
| | | | | | | | | |
| Cash paid for interest – third-party: | | | | | | | | |
| Continuing operations | . € | 218.3 | € | 163.5 | € | 208.2 | | |
| Discontinued operations | | 1.4 | | 1.5 | | 4.2 | | |
| Total | € | 219.7 | € | 165.0 | € | 212.4 | | |
| Cash paid for interest – related-party: | | | | | _ | | | |
| Continuing operations | . € | _ | € | _ | € | 1.2 | | |
| Discontinued operations | | _ | | _ | | 0.7 | | |
| Total | € | _ | € | _ | € | 1.9 | | |
| Net cash paid for taxes: | | | | | _ | | | |
| Continuing operations | . € | 16.4 | € | 35.3 | € | 14.2 | | |
| Discontinued operations | | 29.0 | | 16.6 | | 19.7 | | |
| Total | € | 45.4 | € | 51.9 | € | 33.9 | | |
| | | | | | _ | | | |
| Details of end of period cash and cash equivalents and restricted cash: | | | | | | | | |
| Cash and cash equivalents | € | 16.9 | € | 25.7 | € | 22.1 | | |
| Restricted cash included in other current assets and other assets, net | | 0.9 | | 0.9 | | 0.9 | | |
| Total cash and cash equivalents and restricted cash | € | 17.8 | € | 26.6 | € | 23.0 | | |

(1) Basis of Presentation

UPC Holding B.V. (UPC Holding), UPC Slovakia Holding I B.V. (UPC Slovakia), UPC Poland Holding B.V. (UPC Poland) and Liberty Global Finance II (UK) Limited (LG Finance II) are wholly-owned subsidiaries of Liberty Global plc (Liberty Global). The accompanying combined financial statements include the historical financial information of UPC Holding and its subsidiaries, UPC Slovakia and its subsidiaries (Slovakia), UPC Poland and its subsidiaries (Poland) and LG Finance II (collectively, the UPC Holding Group).

Slovakia, Poland and LG Finance II, which are owned by subsidiaries of Liberty Global outside of the UPC Holding Group, are restricted subsidiaries for purposes of the facilities agreement and bond indentures governing the debt of the UPC Holding Group. Accordingly, the accompanying financial statements are prepared on a combined basis in order to comply with the facilities agreement and bond indentures governing the debt of the UPC Holding Group. In these notes, the terms "we," "our," "our company" and "us" may refer, as the context requires, to the UPC Holding Group.

Our continuing operations comprise businesses that provide residential and business-to-business (**B2B**) communications services in Switzerland and Slovakia.

In addition, we currently provide residential and B2B communications services in Poland. On September 22, 2021, we entered into an agreement to sell our operations in Poland. Accordingly, in these combined financial statements, our operations in Poland are reflected as discontinued operations for all periods presented. For additional information, see note 5.

Through July 31, 2019, we provided residential and B2B communications services in Hungary, the Czech Republic and Romania. In addition, through May 2, 2019, we provided direct-to-home satellite (**DTH**) services to residential customers in Hungary, the Czech Republic, Romania and Slovakia through a Luxembourg-based organization that we refer to as "**UPC DTH**". Accordingly, in these combined financial statements, our operations in Hungary, the Czech Republic and Romania and the operations of UPC DTH are presented as discontinued operations for all applicable periods. For information regarding the disposition of these entities, see note 5.

During the fourth quarter of 2019, we completed (i) the LG Services Transfer and (ii) the UPC France Transfer (each as defined and described in note 5, and together, the "UPC Transfers"). As the UPC Transfers constitute transactions between entities under common control, we have reflected these transfers at carryover basis and our combined financial statements give effect to these transfers for all periods presented.

These combined financial statements have been prepared in accordance with accounting principles generally accepted in the United States (GAAP). Unless otherwise indicated, the amounts presented in these notes relate only to our continuing operations, and ownership percentages and convenience translations into euros are calculated as of December 31, 2021.

These combined financial statements reflect our consideration of the accounting and disclosure implications of subsequent events through March 15, 2022, the date of issuance.

(2) Accounting Changes and Recent Accounting Pronouncements

Accounting Changes

ASU 2019-12

In December 2019, the Financial Accounting Standards Board (the **FASB**) issued Accounting Standards Update (**ASU**) No. 2019-12, *Simplifying the Accounting for Income Taxes* (**ASU 2019-12**), which is intended to improve consistency and simplify several areas of existing guidance. ASU 2019-12 removes certain exceptions to the general principles related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. The new guidance also clarifies the accounting for transactions that result in a stepup in the tax basis of goodwill. We adopted ASU 2019-12 on January 1, 2021, and such adoption did not have a significant impact on our combined financial statements.

ASU 2019-02

In March 2019, the FASB issued ASU No. 2019-02, *Improvements to Accounting for Costs of Films and License Agreements for Program Materials* (ASU 2019-02), which aligns the accounting for production costs of an episodic television series with the accounting for production costs of films. ASU 2019-02 removes the existing constraint that restricts capitalization of production costs to contracted revenue for episodic television series. The amended guidance also permits entities to test a film or license agreement for impairment at the film group level, addresses cash flow classification and provides new disclosure requirements. We adopted ASU 2019-02 on January 1, 2020 on a prospective basis. The adoption of ASU 2019-02 did not have a significant impact on our combined financial statements.

ASU 2018-15

In August 2018, the FASB issued ASU No. 2018-15, Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that is a Service Contract (ASU 2018-15), which requires entities to defer implementation costs incurred that are related to the application development stage in a cloud computing arrangement that is a service contract. ASU 2018-15 requires deferred implementation costs to be amortized over the term of the cloud computing arrangement and presented in the same expense line item as the cloud computing arrangement. All other implementation costs are generally expensed as incurred. We adopted ASU 2018-15 on January 1, 2020 on a prospective basis. As a result of the adoption of ASU 2018-15, (i) certain implementation costs that were previously expensed as incurred are now deferred as prepaid expenses and amortized over the term of the cloud computing arrangement and (ii) certain costs associated with developing interfaces between a cloud computing arrangement and internal-use software that were previously capitalized as property and equipment are now deferred as prepaid expenses and amortized over the term of the cloud computing arrangement. The adoption of ASU 2018-15 did not have a significant impact on our combined financial statements.

ASU 2016-13

In June 2016, the FASB issued ASU No. 2016-13, *Measurement of Credit Losses on Financial Statements* (ASU 2016-13), which changes the recognition model for credit losses related to assets held at amortized cost. ASU 2016-13 eliminates the threshold that a loss must be considered probable to recognize a credit loss and instead requires an entity to reflect its current estimate of lifetime expected credit losses. We adopted ASU 2016-13 on January 1, 2020 on a modified retrospective basis. The adoption of ASU 2016-13 did not have a significant impact on our combined financial statements.

Recent Accounting Pronouncements

ASU 2021-08

In October 2021, the FASB issued ASU No. 2021-08, Accounting for Contract Assets and Contract Liabilities from Contracts with Customers (ASU 2021-08), which requires contract assets and contract liabilities acquired in a business combination to be recognized and measured in accordance with Topic 606, Revenue from Contracts with Customers, as if the acquirer had originated the contracts. ASU 2021-08 is effective for annual reporting periods beginning after December 15, 2022, including interim periods within those fiscal years, with early adoption permitted. The main impact of the adoption of ASU 2021-08 will be the recognition of contract assets and contract liabilities in future business combinations at amounts generally consistent with the carrying value of such assets and liabilities of the acquiree immediately before the acquisition date.

ASU 2020-04

In April 2020, the FASB issued ASU No. 2020-04, Facilitation of the Effects of Reference Rate Reform on Financial Reporting (ASU 2020-04), which provides optional expedients and exceptions for contract modifications, subject to meeting certain criteria, that reference the London Interbank Offered Rate (LIBOR) or another reference rate expected to be discontinued. In accordance with the optional expedients in ASU 2020-04, we expect to modify certain of our debt agreements during 2022 to replace LIBOR with another reference rate and apply the practical expedient to account for the modification as a continuation of the existing contract. We currently do not believe the use of optional expedients in ASU 2020-04 will have a significant impact on our combined financial statements.

For additional information regarding our debt, see note 9.

(3) Summary of Significant Accounting Policies

Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Estimates and assumptions are used in accounting for, among other things, the valuation of acquisition-related assets and liabilities, allowances for doubtful accounts, certain components of revenue, programming and copyright costs, deferred income taxes and related valuation allowances, loss contingencies, fair value measurements, impairment assessments, capitalization of internal costs associated with construction and installation activities, useful lives of long-lived assets, share-based compensation and actuarial liabilities associated with certain benefit plans. Actual results could differ from those estimates.

Principles of Combination

The accompanying combined financial statements include the accounts of the entities described in note 1, all of which are voting interest entities where we or Liberty Global exercise a controlling financial interest through the ownership of a direct or indirect controlling voting interest and variable interest entities for which our company is the primary beneficiary. All significant intercompany accounts and transactions have been eliminated in combination.

Cash and Cash Equivalents and Restricted Cash

Cash equivalents consist of money market funds and other investments that are readily convertible into cash and have maturities of three months or less at the time of acquisition. We record money market funds at the net asset value as there are no restrictions on our ability, contractual or otherwise, to redeem our investments at the stated net asset value.

Restricted cash consists of cash held in restricted accounts, including cash held as collateral for debt and other compensating balances. Restricted cash amounts that are required to be used to purchase long-term assets or repay long-term debt are classified as long-term assets. All other cash that is restricted to a specific use is classified as current or long-term based on the expected timing of the disbursement.

Our significant non-cash investing and financing activities are disclosed in our combined statements of equity (deficit) and in notes 6, 8, 9, 10, 12 and 13.

Cash Flow Statement

For the purpose of determining the classification of cash flows in our combined statements of cash flows, payments on related-party loans are first applied to principal (included as cash flows from financing activities) and then to capitalized interest (included as cash flows from operating activities). Interest-bearing cash advances to related parties and repayments thereof are classified as investing activities. Receipts on related-party receivables are first applied to principal (included as cash flows from investing activities) and then to capitalized interest (included as cash flows from operating activities). All other related-party borrowings, advances and repayments are reflected as financing activities.

For purposes of our combined statements of cash flows, operating-related expenses financed by an intermediary are treated as constructive operating cash outflows and constructive financing cash inflows when the intermediary settles the liability with the vendor as there is no actual cash outflow until we pay the financing intermediary. When we pay the financing intermediary, we record financing cash outflows in our combined statements of cash flows.

The capital expenditures that we report in our combined statements of cash flows do not include (i) amounts that are financed under capital-related vendor financing or finance lease arrangements or (ii) purchased assets transferred to our company by another entity under the common control of Liberty Global in exchange for non-cash increases to the Shareholder Loan or non-cash decreases to the LGEF Receivable (each as defined and described in note 13), or non-cash contributions from our parent entities (non-cash related-party capital additions). Instead, these amounts are reflected as non-cash additions to our property and equipment when the underlying assets are delivered, and in the case of capital-related vendor financing and

finance lease arrangements and non-cash related-party capital additions that are settled through increases to the Shareholder Loan, as repayments of debt when the principal is repaid.

Trade Receivables

Our trade receivables are reported net of an allowance for doubtful accounts. Such allowance aggregated €22.0 million and €23.6 million at December 31, 2021 and 2020, respectively. The allowance for doubtful accounts is based upon our current estimate of lifetime expected credit losses related to uncollectible accounts receivable. We use a number of factors in determining the allowance, including, among other things, collection trends, prevailing and anticipated economic conditions and specific customer credit risk. The allowance is maintained until either payment is received or the likelihood of collection is considered to be remote.

Concentration of credit risk with respect to trade receivables is limited due to the large number of residential and business customers. We also manage this risk by disconnecting services to customers whose accounts are delinquent.

Financial Instruments

Due to the short maturities of cash and cash equivalents, restricted cash, short-term liquid investments, trade and other receivables, other current assets, accounts payable and other accrued and current liabilities, their respective carrying values approximate their respective fair values. For information concerning the fair values of certain of our derivatives and debt, see notes 6 and 9, respectively. For information regarding how we arrive at certain of our fair value measurements, see note 7.

Derivative Instruments

All derivative instruments are recorded on the balance sheet at fair value. As we do not apply hedge accounting to any of our derivative instruments, changes in the fair value of derivative instruments are recognized in earnings or loss.

The net cash received or paid related to our derivative instruments is classified as an operating, investing or financing activity in our combined statements of cash flows based on the objective of the derivative instrument and the classification of the applicable underlying cash flows.

For additional information regarding our derivative instruments, see note 6.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. We capitalize costs associated with the construction of new fixed and mobile transmission and distribution facilities and the installation of new fixed-line services. Capitalized construction and installation costs include materials, labor and other directly attributable costs. Installation activities that are capitalized include (i) the initial connection (or drop) from our fixed-line system to a customer location, (ii) the replacement of a drop and (iii) the installation of equipment for additional services, such as broadband internet or fixed-line services. The costs of other customer-facing activities, such as reconnecting and disconnecting customer locations and repairing or maintaining drops, are expensed as incurred. Interest capitalized with respect to construction activities was not material during any of the periods presented.

Capitalized internal-use software is included as a component of property and equipment. We capitalize internal and external costs directly associated with the development of internal-use software. We also capitalize costs associated with the purchase of software licenses. Maintenance and training costs, as well as costs incurred during the preliminary stage of an internal-use software development project, are expensed as incurred.

Depreciation is computed using the straight-line method over the estimated useful life of the underlying asset. Equipment under finance leases is amortized on a straight-line basis over the shorter of the lease term or estimated useful life of the asset. Useful lives used to depreciate our property and equipment are assessed periodically and are adjusted when warranted. The useful lives of fixed and mobile distribution systems that are undergoing a rebuild are adjusted such that property and equipment to be retired will be fully depreciated by the time the rebuild is completed. For additional information regarding the useful lives of our property and equipment, see note 8.

Additions, replacements and improvements that extend the asset life are capitalized. Repairs and maintenance are charged to operations.

We recognize a liability for asset retirement obligations in the period in which it is incurred if sufficient information is available to make a reasonable estimate of fair values. Asset retirement obligations may arise from the loss of rights of way that we obtain from local municipalities or other relevant authorities, as well as our obligations under certain lease arrangements to restore the property to its original condition at the end of the lease term. Given the nature of our operations, most of our rights of way and certain leased premises are considered integral to our business. Accordingly, for most of our rights of way and certain lease agreements, the possibility is remote that we will incur significant removal costs in the foreseeable future and, as such, we do not have sufficient information to make a reasonable estimate of fair value for these asset retirement obligations.

As of December 31, 2021 and 2020, the recorded value of our asset retirement obligations was €50.8 million and €51.9 million, respectively.

Intangible Assets

Our primary intangible assets relate to goodwill and customer relationships. Goodwill represents the excess purchase price over the fair value of the identifiable net assets acquired in a business combination. Customer relationships are initially recorded at their fair value in connection with business combinations.

Goodwill is not amortized, but instead is tested for impairment at least annually. Intangible assets with finite lives are amortized on a straight-line basis over their respective estimated useful lives to their estimated residual values.

For additional information regarding the useful lives of our intangible assets, see note 8.

Impairment of Property and Equipment and Intangible Assets

When circumstances warrant, we review the carrying amounts of our property and equipment and our intangible assets (other than goodwill) to determine whether such carrying amounts continue to be recoverable. Such changes in circumstance may include (i) an expectation of a sale or disposal of a long-lived asset or asset group, (ii) adverse changes in market or competitive conditions, (iii) an adverse change in legal factors or business climate in the markets in which we operate and (iv) operating or cash flow losses. For purposes of impairment testing, long-lived assets are grouped at the lowest level for which cash flows are largely independent of other assets and liabilities, generally at or below the reporting unit level (see below). If the carrying amount of the asset or asset group is greater than the expected undiscounted cash flows to be generated by such asset or asset group, an impairment adjustment is recognized. Such adjustment is measured by the amount that the carrying value of such asset or asset group exceeds its fair value. We generally measure fair value by considering (a) sale prices for similar assets, (b) discounted estimated future cash flows using an appropriate discount rate and/or (c) estimated replacement cost. Assets to be disposed of are recorded at the lower of their carrying amount or fair value less costs to sell.

We evaluate goodwill for impairment at least annually on October 1 and whenever facts and circumstances indicate that the carrying amount may not be recoverable. For impairment evaluations, we first make a qualitative assessment to determine if the goodwill may be impaired. If it is more-likely-than-not that a reporting unit's fair value is less than its carrying value, we then compare the fair value of the reporting unit to its respective carrying amount. Any excess of the carrying amount over the fair value would be charged to operations as an impairment loss. A reporting unit is an operating segment or one level below an operating segment (referred to as a "component").

Leases

For leases with a term greater than 12 months, we recognize on the lease commencement date (i) ROU assets representing our right to use an underlying asset and (ii) lease liabilities representing our obligation to make lease payments over the lease term. Lease and non-lease components in a contract are generally accounted for separately.

We initially measure lease liabilities at the present value of the remaining lease payments over the lease term. Options to extend or terminate the lease are included only when it is reasonably certain that we will exercise that option. As most of our leases do not provide enough information to determine an implicit interest rate, we generally use a portfolio level incremental

borrowing rate in our present value calculation. We initially measure ROU assets at the value of the lease liability, plus any initial direct costs and prepaid lease payments, less any lease incentives received.

With respect to our finance leases, (i) ROU assets are generally depreciated on a straight-line basis over the shorter of the lease term or the useful life of the asset and (ii) interest expense on the lease liability is recorded using the effective interest method. Operating lease expense is recognized on a straight-line basis over the lease term. For leases with a term of 12 months or less (short-term leases), we do not recognize ROU assets or lease liabilities. Short-term lease expense is recognized on a straight-line basis over the lease term.

Income Taxes

Income taxes are accounted for under the asset and liability method. We recognize deferred tax assets and liabilities for the future tax consequences attributable to differences between the financial statement carrying amounts and income tax basis of assets and liabilities and the expected benefits of utilizing net operating loss and tax credit carryforwards, using enacted tax rates in effect for each taxing jurisdiction in which we operate for the year in which those temporary differences are expected to be recovered or settled. We recognize the financial statement effects of a tax position when it is more-likely-than-not, based on technical merits, that the position will be sustained upon examination. Net deferred tax assets are then reduced by a valuation allowance if we believe it is more-likely-than-not such net deferred tax assets will not be realized. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in earnings or loss in the period that includes the enactment date. Deferred tax liabilities related to investments in foreign subsidiaries and foreign corporate joint ventures that are essentially permanent in duration are not recognized until it becomes apparent that such amounts will reverse in the foreseeable future. In order to be considered essentially permanent in duration, sufficient evidence must indicate that the foreign subsidiary has invested or will invest its undistributed earnings indefinitely, or that earnings will be remitted in a tax-free manner. Interest and penalties related to income tax liabilities are included in income tax benefit or expense in our combined statements of operations.

The Dutch entities of the UPC Holding Group are part of two fiscal unities. UPC Holding is the parent of the largest of these fiscal unities (the UPCH Fiscal Unity). The UPCH Fiscal Unity is part of the larger fiscal unity of Liberty Global Holding B.V. (Liberty Global Holding), which consolidates individual entities and their ultimate Dutch parent company, as one taxpayer for Dutch tax purposes (the LGH Fiscal Unity). The LGH Fiscal Unity includes Dutch entities from the UPCH Fiscal Unity, as well as Dutch entities not included in these combined financial statements. The income taxes of the Dutch entities of the UPC Holding Group are presented in our combined statements of operations on a separate return basis for each tax paying entity or group. The individual entities of the Dutch fiscal unities are jointly and severally liable for all corporate income tax liabilities and the income taxes of their respective fiscal unity. For additional information on our income taxes, see note 11.

Foreign Currency Translation and Transactions

The reporting currency of our company is the euro. The functional currency of our foreign operations generally is the applicable local currency for each foreign entity and equity method investee. Assets and liabilities of foreign entities (including intercompany balances for which settlement is not anticipated in the foreseeable future) are translated at the spot rate in effect at the applicable reporting date. With the exception of certain material transactions, the amounts reported in our combined statements of operations are translated at the average exchange rates in effect during the applicable period. The resulting unrealized cumulative translation adjustment, net of applicable income taxes, is recorded as a component of accumulated other comprehensive earnings or loss in our combined statements of equity (deficit). With the exception of certain material transactions, the cash flows from our operations in foreign countries are translated at the average rate for the applicable period in our combined statements of cash flows. The impacts of material transactions generally are recorded at the applicable spot rates in our combined statements of operations and cash flows. The effect of exchange rates on cash balances held in foreign currencies are separately reported in our combined statements of cash flows.

Transactions denominated in currencies other than our or our combined entities' functional currencies are recorded based on exchange rates at the time such transactions arise. Changes in exchange rates with respect to amounts recorded on our combined balance sheets related to these non-functional currency transactions result in transaction gains and losses that are reflected in our combined statements of operations as unrealized (based on the applicable period end exchange rates) or realized upon settlement of the transactions.

Revenue Recognition

Service Revenue – Fixed Networks. We recognize revenue from the provision of broadband internet, video and fixed-line telephony services over our network to customers in the period the related services are provided, with the exception of revenue recognized pursuant to certain contracts that contain promotional discounts, as described below. Installation fees related to services provided over our network are generally deferred and recognized as revenue over the contractual period, or longer if the upfront fee results in a material renewal right.

Sale of Multiple Products and Services. We sell broadband internet, video, fixed-line telephony and, in some of our markets, mobile services to our customers in bundled packages at a rate lower than if the customer purchased each product on a standalone basis. Revenue from bundled packages generally is allocated proportionally to the individual products or services based on the relative standalone selling price for each respective product or service.

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

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

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

B2B Revenue. We defer upfront installation and certain nonrecurring fees received on B2B contracts where we maintain ownership of the installed equipment. The deferred fees are amortized into revenue on a straight-line basis, generally over the longer of the term of the arrangement or the expected period of performance.

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

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

Subscriber Advance Payments. Payments received in advance for the services we provide are deferred and recognized as revenue when the associated services are provided.

Sales, Use and Other Value-Added Taxes. Revenue is recorded net of applicable sales, use and other value-added taxes (VAT).

For additional information regarding our revenue recognition and related costs, see note 4. For a disaggregation of our revenue by major category and by reportable and geographic segment, see note 17.

Programming Costs

Programming costs include (i) agreements to distribute channels to our customers, (ii) exhibition rights of programming content and (iii) sports rights.

Channel Distribution Agreements. Our channel distribution agreements are generally multi-year contracts for which we are charged either (i) variable rates based upon the number of subscribers or (ii) on a flat fee basis. Certain of our variable rate contracts require minimum guarantees. Programming costs under such arrangements are recorded in operating costs and expenses in our combined statement of operations when the programming is available for viewing.

Exhibition Rights. Our agreements for exhibition rights are generally multi-year license agreements for which we are typically charged a percentage of the revenue earned per program. The current and long-term portions of our exhibition rights acquired under licenses are recorded as other current assets and other assets, net, respectively, on our combined balance sheet when the license period begins and the program is available for its first showing. Capitalized exhibition rights are amortized based on the projected future showings of the content using a straight-line or accelerated method of amortization, as appropriate. Exhibition rights are regularly reviewed for impairment and held at the lower of unamortized cost or estimated net realizable value.

Sports Rights. Our sports rights agreements are generally multi-year contracts for which we are typically charged a flat fee per season. We typically pay for sports rights in advance of the respective season. The current and long-term portions of any payments made in advance of the respective season are recorded as other current assets and other assets, net, respectively, on our combined balance sheet and are amortized on a straight-line basis over the respective sporting season. Sports rights are regularly reviewed for impairment and held at the lower of unamortized cost or estimated net realizable value.

For additional information regarding our programming costs, see note 16.

Share-based Compensation

We recognize all share-based payments from Liberty Global to employees of our combined entities, including grants of employee share-based incentive awards, based on their grant date fair values and Liberty Global's estimates of forfeitures. We recognize share-based compensation expense as a charge to operations over the vesting period based on the grant-date fair value of outstanding awards, which may differ from the fair value of such awards on any given date.

We use the straight-line method to recognize share-based compensation expense for Liberty Global's outstanding share awards to employees of our combined entities that do not contain a performance condition and the accelerated expense attribution method for our outstanding share awards that contain a performance condition and vest on a graded basis.

The grant date fair values for options, share appreciation rights (SARs) and performance-based share appreciation rights (PSARs) are estimated using the Black-Scholes option pricing model, and the grant date fair values for restricted share units (RSUs) and performance-based restricted share units (PSUs) are based upon the closing share price of Liberty Global ordinary shares on the date of grant. Liberty Global considers historical exercise trends in its calculation of the expected life of options and SARs granted by Liberty Global to employees. The expected volatility for options and SARs related to Liberty Global ordinary shares is generally based on a combination of (i) historical volatilities for a period equal to the expected average life of the awards and (ii) volatilities implied from publicly-traded options for Liberty Global ordinary shares.

Litigation Costs

Legal fees and related litigation costs are expensed as incurred.

(4) Revenue Recognition and Related Costs

Contract Balances

If we transfer goods or services to a customer but do not have an unconditional right to payment, we record a contract asset. Contract assets typically arise from the uniform recognition of introductory promotional discounts over the contract period and accrued revenue for handset sales. Our contract assets were ϵ 18.7 million and ϵ 29.6 million as of December 31, 2021 and 2020, respectively. The current and long-term portions of our contract asset balances are included within other current assets and other assets, net, respectively, on our combined balance sheets.

We record deferred revenue when we receive payment prior to transferring goods or services to a customer. We primarily defer revenue for (i) installation and other upfront services and (ii) other services that are invoiced prior to when services are provided. Our deferred revenue balances were €89.4 million and €200.3 million as of December 31, 2021 and 2020, respectively. The decrease in deferred revenue during 2021 is primarily due to the recognition of €176.7 million of revenue that was included in our deferred revenue balance at December 31, 2020, partially offset by the impact of additions during the period. The long-term portions of our deferred revenue balances are included within other long-term liabilities on our combined balance sheets.

Contract Costs

Our aggregate assets associated with incremental costs to obtain our contracts were \in 53.8 million and \in 26.1 million at December 31, 2021 and 2020, respectively. The current and long-term portions of our assets related to contract costs are included within other current assets and other assets, net, respectively, on our combined balance sheets. During 2021, 2020 and 2019, we amortized \in 15.6 million, \in 15.4 million and \in 11.0 million, respectively, to operating costs and expenses associated with these assets.

Unsatisfied Performance Obligations

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

(5) Acquisitions, Dispositions and Common Control Transfers

2020 Acquisition

On November 11, 2020, we completed the acquisition of Sunrise Communications Group AG (Sunrise) (the Sunrise Acquisition). The Sunrise Acquisition was effected through an all cash public tender offer (the Offer) of the outstanding shares of Sunrise (the Sunrise Shares) for CHF 110 per share for a total purchase price of CHF 5.0 billion (€4.6 billion at the transaction date). In April 2021, we completed a statutory "squeeze-out" procedure, under applicable Swiss law, to acquire the remaining Sunrise Shares that were not acquired pursuant to the tender offer and, accordingly, now hold 100% of the share capital of Sunrise.

We have accounted for the Sunrise Acquisition using the acquisition method of accounting, whereby the total purchase price was allocated to the acquired identifiable net assets of Sunrise based on assessments of their respective fair values, and the excess of the purchase price over the fair values of these identifiable net assets was allocated to goodwill. A summary of the purchase price and the opening balance sheet of Sunrise at the November 11, 2020 acquisition date is presented in the following table. The opening balance sheet below reflects our final purchase price allocation (in millions):

| Cash and cash equivalents | € | 92.2 |
|---|---|-----------|
| Trade receivables, net | | 411.4 |
| Other current assets | | 125.7 |
| Property and equipment, net | | 1,310.7 |
| Goodwill (a) | | 2,917.1 |
| Intangible assets subject to amortization, net | | 2,111.5 |
| Operating lease ROU assets | | 889.4 |
| Other assets, net | | 197.3 |
| Current portion of debt and finance lease obligations | | (113.1) |
| Current operating lease liabilities | | (115.9) |
| Other accrued and current liabilities | | (451.6) |
| Long-term debt and finance lease obligations | | (1,497.1) |
| Long-term operating lease liabilities | | (745.4) |
| Other long-term liabilities | | (521.8) |
| Total purchase price (b) | € | 4,610.4 |

⁽a) The goodwill recognized in connection with the Sunrise Acquisition is primarily attributable to (i) the opportunity to leverage Sunrise's existing mobile network to gain immediate access to potential customers and (ii) estimated synergy benefits through the integration of Sunrise with our existing operations in Switzerland.

⁽b) Excludes direct acquisition costs of €23.4 million incurred during 2020, which are included in impairment, restructuring and other operating items, net, in our combined statement of operations.

Unaudited Pro Forma Information

The following unaudited pro forma combined operating results give effect to the Sunrise Acquisition as if it had been completed as of January 1, 2019. These pro forma amounts are not necessarily indicative of the operating results that would have occurred if the Sunrise Acquisition had occurred on such date. The pro forma adjustments are based on certain assumptions that we believe are reasonable.

| | Y | Year ended December 3 | | | |
|--|---|-----------------------|---|---------|--|
| | | 2020 | | 2019 | |
| | | in millions | | | |
| Revenue | € | 2,867.0 | € | 2,832.3 | |
| Net loss attributable to parent entities | € | (452.0) | € | (267.7) | |

Our combined statement of operations for 2020 includes revenue and net loss of €260.9 million and €13.2 million, respectively, attributable to Sunrise.

Pending Disposition

On September 22, 2021, we entered into a sale and purchase agreement (the **Purchase Agreement**), pursuant to which we agreed to sell 100% of our operations in Poland to a third party for a total enterprise value of Polish zloty (**PLN**) 7,025.0 million (€1,531.5 million), subject to customary debt and working capital adjustments at completion. Closing of the transaction, currently expected to occur in the first half of 2022, is subject to the satisfaction of certain conditions, including requisite regulatory approval, which was received in March 2022.

The proceeds from the sale are expected to be used (i) to repay a portion of our outstanding indebtedness and (ii) for general corporate purposes.

Effective with the signing of the Purchase Agreement, we began presenting UPC Poland as a discontinued operation and, accordingly, we no longer depreciate or amortize the associated long-lived assets. In our combined balance sheets and statements of operations and cash flows, UPC Poland is reflected as a discontinued operation for all periods presented. No debt, interest or derivative instruments have been allocated to discontinued operations. Prior to being presented as a discontinued operation, UPC Poland was included in our former "Central and Eastern Europe" reportable segment.

2019 Dispositions

Vodafone Disposal Group

On July 31, 2019, Liberty Global CEE Group Holding B.V. (**LG CEE Group Holding**) completed the sale of its operations in Romania, Hungary and the Czech Republic (collectively referred to herein as the "**Vodafone Disposal Group**") to Vodafone Group plc (**Vodafone**) and certain of its subsidiaries. Just prior to completion of the sale, LG CEE Group Holding and the Vodafone Disposal Group were distributed out of the UPC Holding Group to another subsidiary of Liberty Global (the **Vodafone Group Distribution**) and therefore are no longer included within the UPC Holding Group. The distribution was accounted for at carryover basis as a transaction under common control. As the Vodafone Disposal Group was already presented as a discontinued operation and LG CEE Group Holding Group, we did not give retrospective effect to the Vodafone Group Distribution in our combined financial statements. As such, the results and cash flows of the Vodafone Disposal Group (presented as a discontinued operation) and LG CEE Group Holding (presented as a continuing operation) are included in our combined financial statements through July 31, 2019. With the exception of the recognition of a €1.9 million gain related to the sale of shares in UPC Romania SA (**UPC Romania**) that were owned by UPC Poland, which is still a restricted subsidiary of the UPC Holding Group, the results of the sale of the Vodafone Disposal Group are not reflected in our combined financial statements.

UPC DTH

On May 2, 2019, UPC DTH Holding B.V. (UPC DTH Holding) completed the sale of UPC DTH to M7 Group. Just prior to completion of the sale, UPC DTH Holding and UPC DTH were distributed out of the UPC Holding Group to another subsidiary of Liberty Global (the UPC DTH Distribution) and therefore are no longer included within the UPC Holding Group. As a result of the UPC DTH Distribution, the results of the sale of UPC DTH are not reflected in our combined financial statements. The distribution was accounted for at carryover basis as a transaction under common control. As UPC DTH and UPC DTH Holding were already presented as discontinued operations, we did not give retrospective effect to the UPC DTH Distribution in our combined financial statements.

Presentation of Discontinued Operations

The operations of UPC Poland are presented as discontinued operations in our combined financial statements for all periods presented. In addition, the operations of the Vodafone Disposal Group and UPC DTH are presented as discontinued operations for 2019.

The carrying amounts of the major classes of assets and liabilities of UPC Poland as of December 31, 2021 and 2020 are summarized in the following table. Due to the fact that we expect to complete the sale of UPC Poland within 12 months, all of the associated assets and liabilities are classified as current on our combined balance sheets.

| | | Decem | ber 3 | 1, |
|---|---|-------|---------|-------|
| | | 2021 | | 2020 |
| | | in mi | illions | 1 |
| Assets: | | | | |
| Current assets | € | 22.3 | € | 23.0 |
| Property and equipment, net | | 357.3 | | 349.6 |
| Goodwill | | 408.1 | | 409.8 |
| Other assets, net | | 26.4 | | 20.3 |
| Total assets | € | 814.1 | € | 802.7 |
| | | | | |
| Liabilities: | | | | |
| Current portion of debt and finance lease obligations | € | 37.5 | € | 36.3 |
| Other accrued and current liabilities | | 84.3 | | 116.7 |
| Long-term debt and finance lease obligations | | 4.4 | | 4.9 |
| Other long-term liabilities | | 49.4 | | 31.2 |
| Total liabilities | € | 175.6 | € | 189.1 |

The operating results of UPC Poland for 2021 and 2020 are summarized in the following table. These amounts exclude intercompany revenue and expenses that are eliminated within our combined statements of operations.

| | | Year ended December 31, | | | | | |
|--|---|-------------------------|------|--------|--|--|--|
| | | 2021 | 2021 | | | | |
| | | in mi | 3 | | | | |
| Revenue | € | 384.8 | € | 382.1 | | | |
| Operating income | € | 66.5 | € | 8.2 | | | |
| Earnings (loss) before income taxes and noncontrolling interests | € | 63.9 | € | (0.1) | | | |
| Income tax expense | | (40.9) | | (16.6) | | | |
| Net earnings (loss) attributable to parent entities | € | 23.0 | € | (16.7) | | | |

The operating results of UPC Poland, the Vodafone Disposal Group and UPC DTH for 2019 are summarized in the following table. These amounts exclude intercompany revenue and expenses that are eliminated within our combined statement of operations.

| | UPC Poland | | | Vodafone Disposal Group (a) | UP | UPC DTH (b) | | Total |
|--|------------|--------|---|-----------------------------------|----|-------------|---|--------|
| | | | | in mi | | | | |
| Revenue | € | 380.3 | € | 331.9 | € | 32.4 | € | 744.6 |
| Operating income | € | 39.7 | € | 83.5 | € | 8.8 | € | 132.0 |
| Earnings before income taxes | € | 39.8 | € | 79.7 | € | 8.0 | € | 127.5 |
| Income tax expense | | (17.0) | | (8.1) | | | | (25.1) |
| Net earnings attributable to parent entities | € | 22.8 | € | 71.6 | € | 8.0 | € | 102.4 |

⁽a) Includes the operating results of the Vodafone Disposal Group through July 31, 2019, the date the Vodafone Disposal Group was distributed out of the UPC Holding Group.

Common Control Transfers

During the fourth quarter of 2019, we completed (i) the transfer of Liberty Global Services B.V. (LG Services B.V.) from our company to another subsidiary of Liberty Global outside of the UPC Holding Group (the LG Services Transfer) and (ii) the transfer of UPC France Holding B.V. and its subsidiaries (UPC France) from our company to another subsidiary of Liberty Global outside of the UPC Holding Group (the UPC France Transfer), collectively referred to herein as the "UPC Transfers". As the UPC Transfers constitute transactions between entities under common control, we have reflected these transfers at carryover basis and our combined financial statements give effect to these transfers for all periods presented.

The UPC Transfers comprised the transfer of (i) 100% of the shares of LG Services B.V. and (ii) 100% of the shares of UPC France for a total distribution of €1,692.4 million, which was settled through a non-cash increase to equity during 2019.

⁽b) Includes the operating results of UPC DTH through May 2, 2019, the date UPC DTH was distributed out of the UPC Holding Group.

(6) **Derivative Instruments**

In general, we enter into derivative instruments to protect against (i) increases in the interest rates on our variable-rate debt and (ii) foreign currency movements, particularly with respect to borrowings that are denominated in a currency other than the functional currency of the borrowing entity. In this regard, through our combined entities, we have entered into various derivative instruments to manage interest rate exposure and foreign currency exposure, primarily with respect to the United States (U.S.) dollar (\$), the euro (€), the Swiss franc (CHF) and the PLN. We do not apply hedge accounting to our derivative instruments. Accordingly, changes in the fair values of our derivative instruments are recorded in realized and unrealized gains or losses on derivative instruments, net, in our combined statements of operations.

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

| | December 31, 2021 | | | | | December 31, 2020 | | | | | | |
|---|--------------------------|-------|-----|--------|---|-------------------|---------|------|-----------|-------|---|-------|
| | Cu | rrent | Lon | g-term | | Total | Current | | Long-term | | | Total |
| | | | | | | in mi | llions | S | | | | |
| Assets: | | | | | | | | | | | | |
| Cross-currency and interest rate derivative contracts (a) | € | 134.4 | € | 101.4 | € | 235.8 | € | 73.8 | € | 283.7 | € | 357.5 |
| Foreign currency forward and option contracts | | 17.9 | | | | 17.9 | | 0.9 | | | | 0.9 |
| Total | € | 152.3 | € | 101.4 | € | 253.7 | € | 74.7 | € | 283.7 | € | 358.4 |
| Liabilities: | | | | | | | | | | | | |
| Cross-currency and interest rate derivative contracts (a) | € | 120.7 | € | 414.6 | € | 535.3 | € | 75.4 | € | 605.3 | € | 680.7 |
| Foreign currency forward and option contracts | | 11.1 | | | | 11.1 | | 1.0 | | | | 1.0 |
| Total | € | 131.8 | € | 414.6 | € | 546.4 | € | 76.4 | € | 605.3 | € | 681.7 |

⁽a) We consider credit risk relating to our and our counterparties' nonperformance in the fair value assessment of our derivative instruments. In all cases, the adjustments take into account offsetting liability or asset positions. The changes in the credit risk valuation adjustments associated with our cross-currency and interest rate derivative contracts resulted in net gains (losses) of €7.4 million, €65.0 million and (€21.7 million) during 2021, 2020 and 2019, respectively. These amounts are included in realized and unrealized gains (losses) on derivative instruments, net, in our combined statements of operations. For further information regarding our fair value measurements, see note 7.

The details of our realized and unrealized gains (losses) on derivative instruments, net, are as follows:

| | | Year ended December 31, | | | | | | |
|---|---|-------------------------|----|----------|---|-------|--|--|
| | | 2021 2020 | | | | 2019 | | |
| | | | in | millions | | | | |
| Cross-currency and interest rate derivative contracts | € | 173.0 | € | (235.9) | € | 30.1 | | |
| Foreign currency forward and option contracts | | 7.4 | | (28.2) | | (2.8) | | |
| Other | | _ | | | | 0.2 | | |
| Total | € | 180.4 | € | (264.1) | € | 27.5 | | |

The net cash received or paid related to our derivative instruments is classified as an operating, investing or financing activity in our combined statements of cash flows based on the objective of the derivative instrument and the classification of the applicable underlying cash flows. The following table sets forth the classification of the net cash inflows (outflows) of our derivative instruments:

| | | Year ended December 31, | | | | | | |
|----------------------|---|-------------------------|------|----------|------|--------|--|--|
| | | 2021 | 2020 | | 2019 | | | |
| | | | in | millions | | | | |
| | | | | | | | | |
| Operating activities | € | 12.3 | € | 4.8 | € | (16.6) | | |
| Investing activities | | | | (32.9) | | | | |
| Financing activities | | 137.6 | | (45.6) | | 144.2 | | |
| Total | € | 149.9 | € | (73.7) | € | 127.6 | | |

Counterparty Credit Risk

We are exposed to the risk that the counterparties to our derivative instruments will default on their obligations to us. We manage these credit risks through the evaluation and monitoring of the creditworthiness of, and concentration of risk with, the respective counterparties. In this regard, credit risk associated with our derivative instruments is spread across a relatively broad counterparty base of banks and financial institutions. Collateral is generally not posted by either party under our derivative instruments. At December 31, 2021, our exposure to counterparty credit risk included derivative assets with an aggregate fair value of €39.8 million.

We have entered into derivative instruments under master agreements with each counterparty that contain master netting arrangements that are applicable in the event of early termination by either party to such derivative instrument. The master netting arrangements are limited to the derivative instruments governed by the relevant master agreement and are independent of similar agreements.

Under our derivative contracts, it is generally only the non-defaulting party that has a contractual option to exercise early termination rights upon the default of the other counterparty and to set off other liabilities against sums due upon such termination. However, in an insolvency of a derivative counterparty, under the laws of certain jurisdictions, the defaulting counterparty or its insolvency representatives may be able to compel the termination of one or more derivative contracts and trigger early termination payment liabilities payable by us, reflecting any mark-to-market value of the contracts for the counterparty. Alternatively, or in addition, the insolvency laws of certain jurisdictions may require the mandatory set off of amounts due under such derivative contracts against present and future liabilities owed to us under other contracts between us and the relevant counterparty. Accordingly, it is possible that we may be subject to obligations to make payments, or may have present or future liabilities owed to us partially or fully discharged by set off as a result of such obligations, in the event of the insolvency of a derivative counterparty, even though it is the counterparty that is in default and not us. To the extent that we are required to make such payments, our ability to do so will depend on our liquidity and capital resources at the time. In an insolvency of a defaulting counterparty, we will be an unsecured creditor in respect of any amount owed to us by the defaulting counterparty, except to the extent of the value of any collateral we have obtained from that counterparty.

In addition, where a counterparty is in financial difficulty, under the laws of certain jurisdictions, the relevant regulators may be able to (i) compel the termination of one or more derivative instruments, determine the settlement amount and/or compel, without any payment, the partial or full discharge of liabilities arising from such early termination that are payable by the relevant counterparty, or (ii) transfer the derivative instruments to an alternative counterparty.

Details of our Derivative Instruments

In the following tables, we present the details of the various categories of our derivative instruments, the majority of which are held by our subsidiary, UPC Switzerland Holding B.V.

Cross-currency Derivative Contracts

We generally match the denomination of our borrowings with the functional currency of the supporting operations or, when it is more cost effective, we provide for an economic hedge against foreign currency exchange rate movements by using derivative instruments to synthetically convert unmatched debt into the applicable underlying currency. At December 31, 2021, substantially all of our debt was either directly or synthetically matched to the applicable functional currencies of the underlying operations. The following table sets forth the total notional amounts and the related weighted average remaining contractual lives of our cross-currency swap contracts at December 31, 2021:

| | Notional amount due from counterparty | | Notional amount due to counterparty | Weighted average remaining life | |
|-----|---------------------------------------|-----|-------------------------------------|---------------------------------|----------|
| | in millions | | in millions | | in years |
| \$ | 360.0 | € | 318.1 | | 3.8 |
| \$ | 4,650.0 | CHF | 4,256.9 | (a) | 6.4 |
| € | 2,650.0 | CHF | 2,970.1 | | 4.1 |
| PLN | 2,999.5 | € | 653.5 | (a) | 4.5 |
| € | 777.0 | PLN | 3,302.9 | (a) | 4.0 |
| CHF | 740.0 | € | 701.1 | | 1.0 |

⁽a) Includes certain derivative instruments that are "forward-starting," such that the initial exchange occurs at a date subsequent to December 31, 2021. These instruments are typically entered into in order to extend existing hedges without the need to amend existing contracts.

Interest Rate Swap Contracts

The following table sets forth the total euro equivalents of the notional amounts and the related weighted average remaining contractual lives of our interest rate swap contracts at December 31, 2021:

| Notional amount remaining life Notional amount remaining | Pay f | rate | | Receive fixed rate | | | | | |
|--|-----------------|--------------------------------|---|--------------------|---------------------------------|--|--|--|--|
| in millions in years in millions in year | Notional amount | Notional amount remaining life | | Notional amount | Weighted average remaining life | | | | |
| | in millions | in years | | in millions | in years | | | | |
| € 6,075.2 (a) 3.3 € 4,025.5 4.3 | € 6,075.2 (| 3.3 | € | 4,025.5 | 4.3 | | | | |

⁽a) Includes forward-starting derivative instruments.

Interest Rate Swap Options

From time to time, we enter into interest rate swap options (**swaptions**) which give us the right, but not the obligation, to enter into certain interest rate swap contracts at set dates in the future. Such contracts typically have a life of no more than three years. At December 31, 2021, the option expiration period on each of our swaptions had expired.

Basis Swaps

Our basis swaps involve the exchange of attributes used to calculate our floating interest rates, including (i) the benchmark rate, (ii) the underlying currency and/or (iii) the borrowing period. We typically enter into these swaps to optimize our interest rate profile based on our current evaluations of yield curves, our risk management policies and other factors. At December 31, 2021, the total euro equivalent of the notional amounts due from the counterparty was €4.6 billion and the related weighted average remaining contractual life of our basis swap contracts was 0.5 years.

Interest Rate Caps, Floors and Collars

From time to time, we enter into interest rate cap, floor and collar agreements. Purchased interest rate caps and collars lock in a maximum interest rate if variable rates rise, but also allow our company to benefit, to a limited extent in the case of collars, from declines in market rates. Purchased interest rate floors protect us from interest rates falling below a certain level, generally to match a floating rate floor on a debt instrument. At December 31, 2021, we had no interest rate collar agreements, and the total euro equivalents of the notional amounts of our purchased interest rate caps and floors were ϵ 400.0 million and ϵ 4,331.4 million, respectively.

Impact of Derivative Instruments on Borrowing Costs

Excluding forward-starting instruments, the impact of the derivative instruments that mitigate our foreign currency and interest rate risk, as described above, was a decrease of 14 basis points to our borrowing costs as of December 31, 2021.

Foreign Currency Forwards and Options

We enter into foreign currency forward and option contracts with respect to non-functional currency exposure, including deal-contingent hedges of the proceeds expected from the sale of UPC Poland. As of December 31, 2021, the total euro equivalent of the notional amounts of our foreign currency forward and option contracts was €2.1 billion.

(7) Fair Value Measurements

We use the fair value method to account for our derivative instruments. The reported fair values of these instruments as of December 31, 2021 are unlikely to represent the value that will be paid or received upon the ultimate settlement or disposition of these assets and liabilities.

GAAP provides for a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. Level 1 inputs are quoted market prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. Level 2 inputs are inputs other than quoted market prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for the asset or liability. We record transfers of assets or liabilities into or out of Levels 1, 2 or 3 at the beginning of the quarter during which the transfer occurred. During 2021, no material transfers were made.

All of our Level 2 inputs (interest rate futures and swap rates) and certain of our Level 3 inputs (credit spreads) are obtained from pricing services. These inputs, or interpolations or extrapolations thereof, are used in our internal models to calculate, among other items, yield curves, forward interest and currency rates. In the normal course of business, we receive market value assessments from the counterparties to our derivative contracts. Although we compare these assessments to our internal valuations and investigate unexpected differences, we do not otherwise rely on counterparty quotes to determine the fair values of our derivative instruments. The midpoints of applicable bid and ask ranges generally are used as inputs for our internal valuations.

In order to manage our interest rate and foreign currency exchange risk, we have entered into various derivative instruments, as further described in note 6. The recurring fair value measurements of these instruments are determined using discounted cash flow models. Most of the inputs to these discounted cash flow models consist of, or are derived from, observable Level 2 data for substantially the full term of these instruments. This observable data mostly includes currency rates, interest rate futures and swap rates, which are retrieved or derived from available market data. Although we may extrapolate or interpolate this data, we do not otherwise alter this data in performing our valuations. We classify deal-contingent hedges under Level 3 of the fair value hierarchy, as we adjust the valuations to reflect an internal judgement of the probability of the completion of the deal, which is unobservable. We use a Monte Carlo based approach to incorporate a credit risk valuation adjustment in our fair value measurements to estimate the impact of both our own nonperformance risk and the nonperformance risk of our counterparties. The inputs used for our credit risk valuations, including our and our counterparties' credit spreads, represent our most significant Level 3 inputs, and these inputs are used to derive the credit risk valuation adjustments with respect to these instruments. As we would not expect these parameters to have a significant impact on the valuations of these instruments, we have determined that these valuations fall under Level 2 of the fair value hierarchy. Our credit risk valuation adjustments with respect to our cross-currency and interest rate swaps are quantified and further explained in note 6.

Fair value measurements are also used in connection with nonrecurring valuations performed in connection with impairment assessments and acquisition accounting. The nonrecurring valuations associated with acquisition accounting primarily include the valuation of reporting units, customer relationships and other intangible assets and property and equipment. Unless a reporting unit has a readily determinable fair value, the valuation of reporting units is based at least in part on discounted cash flow analyses. With the exception of certain inputs for our weighted average cost of capital and discount rate calculations that are derived from pricing services, the inputs used in our discounted cash flow analyses, such as forecasts of future cash flows, including inputs with respect to revenue growth and Segment Adjusted EBITDA margin (as defined in note 17), and terminal growth rates, are based on our assumptions. The valuation of customer relationships is primarily based on an excess earnings methodology, which is a form of a discounted cash flow analysis. The excess earnings methodology requires us to estimate the specific cash flows expected from the customer relationship, considering such factors as estimated customer life, the revenue expected to be generated over the life of the customer relationship, contributory asset charges and other factors. Tangible assets are typically valued using a replacement or reproduction cost approach, considering factors such as current prices of the same or similar equipment, the age of the equipment and economic obsolescence. Most of our nonrecurring valuations use significant unobservable inputs and therefore fall under Level 3 of the fair value hierarchy. During 2020, we performed a nonrecurring fair value measurement associated with the Sunrise Acquisition. The weighted average discount rate used in the valuation of the customer relationships acquired in connection with the Sunrise Acquisition was 6.75%. We did not perform any significant nonrecurring fair value measurements during 2021. For information regarding the Sunrise Acquisition, see note 5.

At December 31, 2021 and 2020, all of our derivative instruments fell under Level 2 of the fair value hierarchy, with the exception of certain of our Level 3 foreign currency forward and cross-currency derivative contracts, which had a net liability position of €11.7 million at December 31, 2021. As of December 31, 2021 and 2020, all of our Level 3 swaptions had expired.

(8) Long-lived Assets

Property and Equipment, Net

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

| | Estimated useful life at | | Decem | ber 3 | 31, |
|---------------------------------------|-----------------------------|---|-----------|--------|-----------|
| | December 31, 2021 | | 2021 | | 2020 |
| | | | in mi | llions | 3 |
| Distribution systems | 3 to 30 years | € | 3,957.9 | € | 3,589.6 |
| Customer premises equipment | 3 to 5 years | | 458.4 | | 413.5 |
| Support equipment, buildings and land | 3 to 33 years | | 866.9 | | 676.8 |
| Total property and equipment, gross | | | 5,283.2 | | 4,679.9 |
| Accumulated depreciation | | | (2,697.7) | | (2,240.6) |
| Total property and equipment, net | | € | 2,585.5 | € | 2,439.3 |

Depreciation expense related to our property and equipment was €535.9 million, €292.5 million and €242.8 million during 2021, 2020 and 2019, respectively.

During 2021, 2020 and 2019, we recorded non-cash increases to our property and equipment related to certain vendor financing arrangements of \in 207.8 million, \in 281.9 million and \in 390.8 million, respectively, which exclude related VAT of \in 8.8 million, \in 43.8 million and \in 53.2 million, respectively, that were also financed under these arrangements.

Goodwill

Changes in the carrying amount of our goodwill during 2021 are set forth below:

| | Ja | nuary 1, 2021 | Acquisitions and related adjustments and other | | | | ecember 31, 2021 |
|-------------------|----|------------------|--|-------|---------|---|---------------------|
| | | | | in mi | | | |
| Switzerland | € | 5,575.2 | € | 15.6 | € 197.2 | € | 5,788.0 |
| Central and Other | | 56.6 | | _ | _ | | 56.6 |
| Total | € | 5,631.8 | € | 15.6 | € 197.2 | € | 5,844.6 |

If, among other factors, (i) our enterprise value or Liberty Global's equity value were to decline or (ii) the adverse impacts of economic, competitive, regulatory or other factors were to cause our results of operations or cash flows to be worse than anticipated, we could conclude in future periods that impairment charges are required in order to reduce the carrying values of our goodwill and, to a lesser extent, other long-lived assets. Any such impairment charges could be significant.

Changes in the carrying amount of our goodwill during 2020 are set forth below:

| | J | anuary 1, 2020 | ar | quisitions ad related justments | c tr ad | Foreign urrency anslation justments nd other | De | cember 31, 2020 |
|-------------------|---|-------------------|-------------|---------------------------------------|---------------|--|----|--------------------|
| | | | in millions | | | | | |
| Switzerland | € | 2,629.9 | € | 2,943.7 | € | 1.6 | € | 5,575.2 |
| Central and Other | | 56.6 | | | | _ | | 56.6 |
| Total | € | 2,686.5 | € | 2,943.7 | € | 1.6 | € | 5,631.8 |

Intangible Assets Subject to Amortization, Net

The details of our intangible assets subject to amortization are set forth below:

| | | D | ecember 31, 202 | 21 | December 31, 2020 | | | | | |
|------------------------|--|-----------------------------|--------------------------|---------------------------|-----------------------------|--------------------------|---------------------------|--|--|--|
| | Estimated useful life at December 31, 2021 | Gross carrying amount | Accumulated amortization | Net carrying amount | Gross carrying amount | Accumulated amortization | Net carrying amount | | | |
| | | | | | | | | | | |
| Customer relationships | 5 to 11 years | € 1,867.6 | € (390.4) | € 1,477.2 | € 1,788.6 | € (76.6) | € 1,712.0 | | | |
| Other | | 393.4 | (63.0) | 330.4 | 372.3 | (14.1) | 358.2 | | | |
| Total | | € 2,261.0 | € (453.4) | € 1,807.6 | € 2,160.9 | € (90.7) | € 2,070.2 | | | |

Amortization expense related to intangible assets with finite useful lives was \in 344.6 million, \in 60.4 million and \in 6.0 million during 2021, 2020 and 2019, respectively. Based on our amortizable intangible asset balances at December 31, 2021, we expect that amortization expense will be as follows for the next five years and thereafter (in millions):

| 2022 € | 355.3 |
|------------|---------|
| 2023 | 351.5 |
| 2024 | 342.6 |
| 2025 | 340.8 |
| 2026 | 309.6 |
| Thereafter | 107.8 |
| Total | 1,807.6 |

(9) **Debt**

The euro equivalents of the components of our combined third-party debt are as follows:

| _ | December 31, 2021 | | | | | | |
|--|---------------------|-----------------|----|------------|----------|---------|--|
| | Weighted | | | Principa | l am | ount | |
| | average interest | est borrowing . | | Decem | nber 31, | | |
| _ | rate (a) | | | 2021 | | 2020 | |
| | | | ir | n millions | | | |
| Parent entities – UPC Holding Senior Notes | 4.59 % | € — | € | 1,064.1 | € | 1,031.9 | |
| Combined entities: | | | | | | | |
| UPC Holding Bank Facility (c) | 2.88 % | 715.2 | | 3,567.8 | | 3,899.3 | |
| UPC SPE Notes | 4.43 % | _ | | 1,697.8 | | 1,140.0 | |
| Vendor financing (d) | 1.14 % | _ | | 270.2 | | 275.5 | |
| Total third-party debt before deferred financing costs and discounts (e) | 3.48 % | € 715.2 | € | 6,599.9 | € | 6,346.7 | |

The following table provides a reconciliation of total third-party debt before deferred financing costs and discounts to total debt and finance lease obligations:

| | | December 31, | | | | |
|--|---|--------------|-------|---------|--|--|
| | | 2021 | 2020 | | | |
| | | in mi | llion | S | | |
| Total third-party debt before deferred financing costs and discounts | € | 6,599.9 | € | 6,346.7 | | |
| Deferred financing costs and discounts, net | | (31.9) | | (80.6) | | |
| Total carrying amount of third-party debt | | 6,568.0 | | 6,266.1 | | |
| Finance lease obligations (note 10) | | 11.7 | | 15.2 | | |
| Total third-party debt and finance lease obligations | | 6,579.7 | | 6,281.3 | | |
| Related-party debt (note 13) | | | | 67.6 | | |
| Total debt and finance lease obligations | | 6,579.7 | | 6,348.9 | | |
| Current maturities of debt and finance lease obligations | | (273.3) | | (279.3) | | |
| Long-term debt and finance lease obligations | € | 6,306.4 | € | 6,069.6 | | |

⁽a) Represents the weighted average interest rate in effect at December 31, 2021 for all borrowings outstanding pursuant to each debt instrument, including any applicable margin. The interest rates presented represent stated rates and do not include the impact of derivative instruments, deferred financing costs, original issue premiums or discounts and commitment fees, all of which affect our overall cost of borrowing. Including the effects of derivative instruments, original issue premiums or discounts and commitment fees, but excluding the impact of deferred financing costs, the weighted average interest rate on our aggregate third-party variable- and fixed-rate indebtedness was 3.46% at December 31, 2021. For information regarding our derivative instruments, see note 6.

⁽b) Unused borrowing capacity represents the maximum availability under the UPC Holding Bank Facility (as defined and described below) at December 31, 2021 without regard to covenant compliance calculations or other conditions precedent to borrowing. At December 31, 2021, based on the most restrictive applicable leverage covenants and leverage-based restricted payment tests, the full €715.2 million of unused borrowing capacity was available to be borrowed and there were no additional restrictions on our ability to make loans or distributions from this availability. Upon completion of the relevant December 31, 2021 compliance reporting requirements, and based on the most restrictive applicable leverage covenants and leverage-based restricted payment tests, we expect the full amount of unused borrowing capacity will continue to be available, with €637.0 million available to loan or distribute. Our above

expectations do not consider any actual or potential changes to our borrowing levels or any amounts loaned or distributed subsequent to December 31, 2021, or the impact of additional amounts that may be available to borrow, loan or distribute under certain defined baskets within the UPC Holding Bank Facility.

- (c) Unused borrowing capacity under the UPC Holding Bank Facility relates to an equivalent €715.2 million under the UPC Revolving Facility, part of which has been made available as an ancillary facility. During 2021, the UPC Revolving Facility was amended to provide for maximum borrowing capacity of €736.4 million, including €23.0 million under the related ancillary facility. With the exception of €21.2 million of borrowings under the ancillary facility, the UPC Revolving Facility was undrawn at December 31, 2021.
- (d) Represents amounts owed to various creditors pursuant to interest-bearing vendor financing arrangements that are used to finance certain of our property and equipment additions and operating expenses. These arrangements extend our repayment terms beyond a vendor's original due dates (e.g. extension beyond a vendor's customary payment terms, which are generally 90 days or less) and as such are classified outside of accounts payable as debt on our combined balance sheets. These obligations are generally due within one year and include VAT that was also financed under these arrangements. For purposes of our combined statements of cash flows, operating-related expenses financed by an intermediary are treated as constructive operating cash outflows and constructive financing cash inflows when the intermediary settles the liability with the vendor as there is no actual cash outflow until we pay the financing intermediary. During 2021 and 2020, the constructive cash outflow included in cash flows from operating activities and the corresponding constructive cash inflow included in cash flows from financing activities related to these operating expenses was €192.0 million and €110.6 million, respectively. Repayments of vendor financing obligations at the time we pay the financing intermediary are included in repayments and repurchases of debt and finance lease obligations in our combined statements of cash flows.
- (e) As of December 31, 2021 and 2020, our debt had an estimated fair value of €6.7 billion and €6.5 billion, respectively. The estimated fair values of our debt instruments are generally determined using the average of applicable bid and ask prices (mostly Level 1 of the fair value hierarchy). For additional information regarding fair value hierarchies, see note 7.

General Information

Credit Facility. We have entered into a senior secured credit facility agreement with certain financial and other institutions (the "**credit facility**"). Our credit facility contains certain covenants, the more notable of which are as follows:

- Our credit facility contains certain consolidated net leverage ratios which are required to be complied with (i) on an incurrence basis and/or (ii) when the associated revolving credit facility has been drawn beyond a specified percentage of the total available revolving credit commitments on a maintenance basis;
- Subject to certain customary and agreed exceptions, our credit facility contains certain restrictions which, among other
 things, restrict our ability to (i) incur or guarantee certain financial indebtedness, (ii) make certain disposals and
 acquisitions, (iii) create certain security interests over our assets and (iv) make certain restricted payments to our direct
 and/or indirect parent companies through dividends, loans or other distributions;
- Our credit facility requires that we (i) guarantee the payment of all sums payable under the credit facility and (ii) grant first-ranking security over substantially all of our assets to secure the payment of all sums payable thereunder;
- In addition to certain mandatory prepayment events, our credit facility provides that the instructing group of lenders, under certain circumstances, may cancel the group's commitments thereunder and declare the loan(s) thereunder due and payable after the applicable notice period following the occurrence of a change of control (as specified in our credit facility);
- Our credit facility contains certain customary events of default, the occurrence of which, subject to certain exceptions, materiality qualifications and cure rights, would allow the instructing group of lenders to (i) cancel the total commitments, (ii) declare that all or part of the loans be payable on demand and/or (iii) accelerate all outstanding loans and terminate their commitments thereunder;

- Our credit facility requires that we observe certain affirmative and negative undertakings and covenants, which are subject to certain materiality qualifications and other customary and agreed exceptions; and
- In addition to customary default provisions, our credit facility includes certain cross-default provisions with respect to our other indebtedness, subject to agreed minimum thresholds and other customary and agreed exceptions.

Senior Notes. We have issued certain senior notes. In general, our senior notes (i) are senior obligations of the issuer of such notes that rank equally with all of the existing and future senior debt of such issuer and are senior to all existing and future subordinated debt of such issuer and (ii) are secured by a pledge over the shares of UPC Holding. In addition, the indentures governing our senior notes contain certain covenants, the more notable of which are as follows:

- Our notes contain certain customary incurrence-based covenants. In addition, our notes provide that any failure to pay
 principal at its stated maturity (after giving effect to any applicable grace period) of, or any acceleration with respect
 to, other indebtedness of the issuer or certain subsidiaries over agreed minimum thresholds (as specified under the
 applicable indenture), is an event of default under the respective notes;
- Subject to certain customary and agreed exceptions, our notes contain certain restrictions that, among other things, restrict our ability to (i) incur or guarantee certain financial indebtedness, (ii) make certain disposals and acquisitions, (iii) create certain security interests over our assets and (iv) make certain restricted payments to our direct and/or indirect parent companies through dividends, loans or other distributions; and
- If we or certain of our combined entities (as specified in the applicable indenture) sell certain assets, we must, subject to certain customary and agreed exceptions, offer to repurchase the applicable notes at par, or if a change of control (as specified in the applicable indenture) occurs, we must offer to repurchase all of the relevant notes at a redemption price of 101%.

SPE Notes. From time to time, we create special purpose financing entities (**UPC SPEs**), some of which are owned by third parties (**Third-Party SPEs**). These UPC SPEs are created for the primary purpose of facilitating the offering of senior secured notes, which we collectively refer to as "**UPC SPE Notes**." In this regard, UPC SPE Notes have been issued and are outstanding at December 31, 2021, including those issued by a Third-Party SPE.

The UPC SPEs use the proceeds from the issuance of UPC SPE Notes to fund term loan facilities under the UPC Holding Bank Facility, each a "UPC Funded Facility" and collectively the "UPC Funded Facilities." Each UPC SPE is dependent on payments from the relevant borrowing entity under the applicable UPC Funded Facility in order to service its payment obligations under each respective UPC SPE Note. Each of the UPC Funded Facility term loans creates a variable interest in the respective Third-Party SPE for which the relevant borrowing entity is the primary beneficiary. Accordingly, we are required to consolidate such Third-Party SPEs. As a result, the amounts outstanding under the UPC Funded Facilities of the UPC SPEs, including the Third-Party SPEs, are eliminated in UPC Holding Group's combined financial statements.

Pursuant to the respective indentures for the UPC SPE Notes (the UPC SPE Indentures) and the respective accession agreements for the UPC Funded Facilities, the call provisions, maturity dates and applicable interest rates for each UPC Funded Facility are the same as those of the related UPC SPE Notes. Each UPC SPE, as lender under the relevant UPC Funded Facility, is treated the same as the other lenders under the UPC Holding Bank Facility, with benefits, rights and protections similar to those afforded to the other lenders. Through the covenants in the applicable UPC SPE Indentures and the applicable security interests over the relevant UPC SPE's rights under the applicable UPC Funded Facility granted to secure the UPC SPE's obligations under the relevant UPC SPE Notes, the holders of the UPC SPE Notes are provided indirectly with the benefits, rights, protections and covenants granted to the UPC SPE as lender under the applicable UPC Funded Facility. The UPC SPEs are prohibited from incurring any additional indebtedness, subject to certain exceptions under the UPC SPE Indentures.

UPC Holding Senior Notes

The details of the UPC Holding Senior Notes as of December 31, 2021 are summarized in the following table:

| | | Outstanding princips amount Original | | | amoun | | | | | | | | | |
|---------------------------------|------------------|--|-----------------|-------|-------------|-------|-------|---------|---|--------------------|--------------------|--|-----------------------|--|
| UPC Holding Senior Notes | Maturity | Interest rate | issue amount | | issue | | issue | | | rrowing irrency | Euro equivalent | | Carrying value (a) | |
| | | | | | in millions | | | | | | | | | |
| UPC Holding 3.875% Senior Notes | June 15, 2029 | 3.875% | € | 635.0 | € | 594.3 | € | 594.3 | € | 591.6 | | | | |
| UPC Holding 5.50% Senior Notes | January 15, 2028 | 5.500% | \$ | 550.0 | \$ | 535.0 | | 469.8 | | 467.4 | | | | |
| Total | | | | | | | € | 1,064.1 | € | 1,059.0 | | | | |

⁽a) Amounts are net of deferred financing costs and discounts, where applicable.

Subject to the circumstances described below, the UPC Holding 3.875% Senior Notes are non-callable prior to June 15, 2022 and the UPC Holding 5.50% Senior Notes are non-callable prior to October 15, 2022. At any time prior to June 15, 2022, in the case of the UPC Holding 3.875% Senior Notes, and October 15, 2022, in the case of the UPC Holding 5.50% Senior Notes, the UPC Holding Group may redeem some or all of such UPC Holding Senior Notes by paying a "make-whole" premium, which is the present value of all remaining scheduled interest payments to June 15, 2022 or October 15, 2022 (as applicable) using the discount rate (as specified in the applicable indenture) as of the redemption date plus 50 basis points.

We may redeem some or all of the UPC Holding Senior Notes at the following redemption prices (expressed as a percentage of the principal amount), plus accrued and unpaid interest and additional amounts (as specified in the applicable indenture), if any, to the applicable redemption date, as set forth below:

| | Redemption price | | | | |
|----------------------------|---------------------------------------|--------------------------------------|--|--|--|
| | UPC Holding 3.875% Senior Notes | UPC Holding 5.50% Senior Notes | | | |
| 12-month period commencing | June 15 | October 15 | | | |
| 2022 | 101.938% | 102.750% | | | |
| 2023 | 100.969% | 101.375% | | | |
| 2024 | 100.484% | 100.688% | | | |
| 2025 and thereafter | 100 000% | 100 000% | | | |

UPC SPE Notes

The details of the UPC SPE Notes as of December 31, 2021 are summarized in the following table:

| | | | | | Outstandin amo | | | | | | |
|-------------------------------|---------------|------------------|----|---------|-------------------|---------|-------|---------|-------------------|---------|-------------------|
| UPC SPE Notes | Maturity | Interest rate | | | issue | | issue | | issue Borrowing E | | Euro quivalent |
| | | | | | | in mi | | | | | |
| 2031 UPC Senior Secured Notes | July 15, 2031 | 4.875% | \$ | 1,250.0 | \$ | 1,250.0 | € | 1,097.8 | € | 1,096.6 | |
| | | | | | | | | | | | |
| Third-Party SPE: | | | | | | | | | | | |
| UPCB Finance VII Euro Notes | June 15, 2029 | 3.625% | € | 600.0 | € | 600.0 | | 600.0 | | 596.5 | |
| Total | | | | | | | € | 1,697.8 | € | 1,693.1 | |

⁽a) Amounts are net of deferred financing costs and discounts, where applicable.

Subject to the circumstances described below, the UPCB Finance VII Euro Notes are non-callable prior to June 15, 2022 and the 2031 UPC Senior Secured Notes are non-callable prior to July 15, 2026 (each a UPC SPE Notes Call Date). If, however, at any time prior to the applicable UPC SPE Notes Call Date, all or a portion of the loans under the related UPC Funded Facility are voluntarily prepaid (an Early Redemption Event), then the relevant UPC SPE will be required to redeem an aggregate principal amount of its UPC SPE Notes equal to the aggregate principal amount of the loans prepaid under the relevant UPC Funded Facility. In general, the redemption price payable will equal 100% of the principal amount of the UPC SPE Notes to be redeemed and a "make-whole" premium, which is the present value of all remaining scheduled interest payments to the applicable UPC SPE Notes Call Date using the discount rate (as specified in the applicable UPC SPE Indenture) as of the redemption date plus 50 basis points.

Upon the occurrence of an Early Redemption Event on or after the applicable UPC SPE Notes Call Date, the relevant UPC SPE will redeem an aggregate principal amount of its UPC SPE Notes equal to the principal amount prepaid under the related UPC Funded Facility at the following redemption prices (expressed as a percentage of the principal amount), plus accrued and unpaid interest and additional amounts (as specified in the applicable UPC SPE Indenture), if any, to the applicable redemption date, as set forth below:

| | Redemp | tion price |
|----------------------------|--------------------------------|----------------------------------|
| | UPCB Finance VII Euro Notes | 2031 UPC Senior Secured Notes |
| 12-month period commencing | June 15 | July 15 |
| 2022 | 101.813% | N.A. |
| 2023 | 100.906% | N.A. |
| 2024 | 100.453% | N.A. |
| 2025 | 100.000% | N.A. |
| 2026 | 100.000% | 102.438% |
| 2027 | 100.000% | 101.219% |
| 2028 | 100.000% | 100.609% |
| 2029 and thereafter | N.A. | 100.000% |

UPC Holding Bank Facility

The UPC Holding Bank Facility is the senior secured credit facility of certain combined entities of the UPC Holding Group. The details of our borrowings under the UPC Holding Bank Facility as of December 31, 2021 are summarized in the following table:

| UPC Holding Bank Facility | Maturity | Interest rate | Facility amount (borrowing currency) (a) | | Unused borrowing capacity in mil | | | utstanding principal amount | | Carrying value (b) |
|--------------------------------|------------------|----------------|---|---------|---|-------|---|-----------------------------------|---|--------------------|
| AQ (c) | June 15, 2029 | 3.625% | € | 600.0 | € | _ | € | 600.0 | € | 596.5 |
| AT (d) | April 30, 2028 | LIBOR + 2.25% | \$ | 700.0 | | | | 614.8 | | 612.0 |
| AU (e) | April 30, 2029 | EURIBOR + 2.5% | € | 400.0 | | | | 400.0 | | 398.2 |
| AX (d) | January 31, 2029 | LIBOR + 3.0% | \$ | 1,925.0 | | | | 1,690.5 | | 1,677.6 |
| AY (e) | January 31, 2029 | EURIBOR + 3.0% | € | 862.5 | | _ | | 862.5 | | 857.9 |
| AZ (c) | July 15, 2031 | 4.875% | \$ | 1,250.0 | | | | 1,097.8 | | 1,096.6 |
| UPC Revolving Facility (f) | May 31, 2026 | EURIBOR + 2.5% | € | 736.4 | | 715.2 | | _ | | _ |
| Elimination of Facilities AQ a | and AZ (c) | | | | | | | (1,697.8) | | (1,693.1) |
| Total | | | | | € | 715.2 | € | 3,567.8 | € | 3,545.7 |

⁽a) Except as described in (c) below, amounts represent total third-party facility amounts at December 31, 2021.

- (d) UPC Facilities AT and AX are each subject to a LIBOR floor of 0.0%.
- (e) UPC Facilities AU and AY are each subject to a EURIBOR floor of 0.0%.
- (f) The UPC Revolving Facility has a fee on unused commitments of 1.0% per year.

⁽b) Amounts are net of deferred financing costs and discounts, where applicable.

⁽c) As further discussed in the above description of the UPC SPE Notes, the amounts outstanding under UPC Facilities AQ and AZ are eliminated in our combined financial statements.

Financing Transactions

Below we provide summary descriptions of certain financing transactions completed during 2021, 2020 and 2019. Certain of our financing transactions may include non-cash borrowings and repayments. During 2021, non-cash borrowings and repayments aggregated €2.4 billion. During 2020 and 2019, there were no non-cash borrowings and repayments of debt.

2021 Financing Transactions

During 2021, we completed a number of financing transactions that generally resulted in lower interest rates and extended maturities, including the issuance of certain senior secured notes and the entrance into certain accession agreements under the UPC Holding Bank Facility. Our outstanding indebtedness as of December 31, 2021 after completion of the aforementioned financing transactions is summarized in the tables above. In connection with these transactions, we recognized an aggregate loss on debt extinguishment of ϵ 75.1 million related to (i) the write-off of ϵ 64.3 million of unamortized deferred financing costs and discounts and (ii) the payment of ϵ 10.8 million of redemption premiums. In September 2021, we entered into an agreement to sell our operations in Poland, the proceeds of which are expected to be used, in part, to repay a portion of our outstanding indebtedness. For additional information, see note 5.

2020 and 2019 Financing Transactions

During 2020 and 2019, we completed a number of financing transactions that generally resulted in lower interest rates and extended maturities. In connection with these transactions, we recognized losses on debt extinguishment of \in 40.5 million and \in 13.8 million during 2020 and 2019, respectively. These losses primarily include (i) during 2020, the payment of \in 39.1 million of redemption premiums and (ii) the write-off of net unamortized deferred financing costs, discounts and premiums of \in 0.1 million and \in 13.8 million, respectively.

Maturities of Debt

Maturities of our debt as of December 31, 2021 are presented below and represent euro equivalents based on December 31, 2021 exchange rates (in millions):

| Year ending December 31: | | |
|---|---|---------|
| 2022 (a) | € | 270.2 |
| 2023 | | _ |
| 2024 | | _ |
| 2025 | | _ |
| 2026 | | _ |
| Thereafter | | 6,329.7 |
| Total debt maturities (b) | | 6,599.9 |
| Deferred financing costs and discounts, net | | (31.9) |
| Total debt | € | 6,568.0 |
| Current portion | € | 270.2 |
| Noncurrent portion | € | 6,297.8 |

- (a) Maturities in year 2022 represent amounts related to vendor financing obligations.
- (b) Includes UPC SPE Notes issued by a Third-Party SPE which, as described above, is included in our combined financial statements.

(10) Leases

General

We enter into operating and finance leases for network equipment, real estate and vehicles. We provide residual value guarantees on certain of our vehicle leases.

Lease Balances

A summary of our ROU assets and lease liabilities is set forth below:

| ROU assets: Operating leases (a) $ \begin{array}{c} 2021 & 202 \\ \hline \text{in millions} \end{array} $ | |
|--|-------|
| ROU assets: | 0 |
| | |
| Operating leages (a) | |
| Operating leases (a) € 979.1 € | 989.2 |
| Finance leases (b) 10.2 | 10.2 |
| Total ROU assets <u>€ 989.3</u> <u>€</u> | 99.4 |
| | |
| Lease liabilities: | |
| Operating leases € 993.3 € | 71.0 |
| Finance leases (c) 11.7 | 15.2 |
| Total lease liabilities $\underline{\epsilon}$ 1,005.0 $\underline{\epsilon}$ | 986.2 |

- (a) At December 31, 2021, the weighted average remaining lease term for operating leases was 13.7 years and the weighted average discount rate was 6.1%. During 2021, 2020 and 2019, we recorded non-cash additions to our operating lease ROU assets of €91.3 million, €16.7 million and €7.8 million, respectively.
- (b) Our finance lease ROU assets are included in property and equipment, net, on our combined balance sheets. At December 31, 2021, the weighted average remaining lease term for finance leases was 5.9 years and the weighted average discount rate was 5.6%. During 2021, 2020 and 2019, we recorded non-cash additions to our finance lease ROU assets of €1.7 million, €1.2 million and €2.9 million, respectively.
- (c) The current and long-term portions of our finance lease obligations are included within current portion of debt and finance lease obligations and long-term debt and finance lease obligations, respectively, on our combined balance sheets.

A summary of our aggregate lease expense is set forth below:

| | | Year ended December 31, | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|-------------------------|---|------|---|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|
| | | 2021 2020 | | 2020 | | 2020 | | 2020 | | 2020 | | 2020 | | 2020 | | 2020 | | 2020 | | 2019 |
| | | in millions | | | | | | | | | | | | | | | | | | |
| Finance lease expense: | | | | | | | | | | | | | | | | | | | | |
| Depreciation and amortization | € | 2.2 | € | 2.4 | € | 2.4 | | | | | | | | | | | | | | |
| Interest expense | | 0.7 | | 0.7 | | 0.8 | | | | | | | | | | | | | | |
| Total finance lease expense | | 2.9 | | 3.1 | | 3.2 | | | | | | | | | | | | | | |
| Operating lease expense (a) | | 138.6 | | 35.2 | | 23.8 | | | | | | | | | | | | | | |
| Short-term lease expense (a) | | 4.3 | | 3.7 | | 3.5 | | | | | | | | | | | | | | |
| Total lease expense | € | 145.8 | € | 42.0 | € | 30.5 | | | | | | | | | | | | | | |

⁽a) Operating lease expense and short-term lease expense are included in programming and other direct costs of services, other operating expenses, SG&A expenses and impairment, restructuring and other operating items, net, in our combined statements of operations.

A summary of our cash outflows from operating and finance leases is set forth below:

| | | 1, | | | | | | |
|---|---|-------|-------------|------|------|------|--|------|
| | | 2021 | 021 2020 | | 2020 | | | 2019 |
| | | | in millions | | | | | |
| Cash paid for amounts included in the measurement of lease liabilities: | | | | | | | | |
| Operating cash outflows from operating leases | € | 125.2 | € | 22.9 | € | 24.7 | | |
| Operating cash outflows from finance leases (interest component) | | 0.7 | | 0.7 | | 0.8 | | |
| Financing cash outflows from finance leases (principal component) | | 2.2 | | 2.8 | | 2.8 | | |
| Total cash outflows from operating and finance leases | € | 128.1 | € | 26.4 | € | 28.3 | | |

Maturities of our operating and finance lease obligations as of December 31, 2021 are presented below and represent euro equivalents based on December 31, 2021 exchange rates:

| | Operating leases | Finance leases |
|---------------------------------|------------------|-------------------|
| | in m | illions |
| Year ending December 31: | | |
| 2022 | € 131.4 | € 3.8 |
| 2023 | 123.1 | 2.6 |
| 2024 | 116.7 | 2.4 |
| 2025 | 111.3 | 2.2 |
| 2026 | 105.2 | 2.1 |
| Thereafter | 900.9 | 0.7 |
| Total payments | 1,488.6 | 13.8 |
| Less: present value discount | (495.3) | (2.1) |
| Present value of lease payments | € 993.3 | € 11.7 |
| Current portion | € 71.4 | € 3.1 |
| Noncurrent portion | € 921.9 | € 8.6 |

(11) Income Taxes

The Dutch entities of the UPC Holding Group are part of two fiscal unities. UPC Holding is the parent of the UPCH Fiscal Unity. The UPCH Fiscal Unity is part of the LGH Fiscal Unity, which consolidates individual entities and their ultimate Dutch parent company as one taxpayer for Dutch tax purposes. The LGH Fiscal Unity includes Dutch entities from the UPCH Fiscal Unity, as well as Dutch entities not included in these combined financial statements. Tax amounts allocated between members of the LGH Fiscal Unity are not subject to tax-sharing agreements and no cash payments are made between the companies related to the Dutch tax attributes. Accordingly, any related-party tax allocations are reflected as adjustments to parent entities in our combined statements of equity (deficit). During the periods presented in these combined financial statements, the majority of the related-party tax allocations represented tax benefits generated by Dutch entities that were recorded net of applicable valuation allowances. Therefore, these related-party tax allocations resulted in no net tax allocations. The income taxes of entities that are not included within the UPCH Fiscal Unity are included in our combined financial statements on a separate return basis for each tax-paying entity or group based on the local tax law.

For tax purposes, the taxable income or net operating losses generated by Dutch entities of the UPCH Fiscal Unity can be offset with taxable income or net operating losses of non-UPC Holding Group subsidiaries within the LGH Fiscal Unity. The UPCH Fiscal Unity and LGH Fiscal Unity do not operate under a tax sharing agreement and no cash payments are made between the companies related to Dutch tax liabilities.

The domestic Dutch fiscal unities and foreign components of our loss from continuing operations before income taxes are as follows:

| | Year ended December 31, | | | | | |
|--|-------------------------|-------------|-----------|--|--|--|
| | 2021 | 2020 | 2019 | | | |
| | | in millions | | | | |
| Switzerland | € (258.1) | € (11.2) | € 159.0 | | | |
| The Netherlands | 202.9 | (261.5) | (268.2) | | | |
| Intercompany activity with discontinued operations | _ | _ | (31.5) | | | |
| Other | (1.1) | 0.4 | 4.4 | | | |
| Total | € (56.3) | € (272.3) | € (136.3) | | | |

Income tax benefit (expense) consists of:

| | Current | | _ | Deferred | | Total |
|-------------------------------|-------------|--------|---|----------|---|--------|
| | in millions | | | | | |
| Year ended December 31, 2021: | | | | | | |
| Switzerland | € | (6.6) | € | 53.3 | € | 46.7 |
| Other | | 0.1 | | (2.3) | | (2.2) |
| Total | € | (6.5) | € | 51.0 | € | 44.5 |
| Year ended December 31, 2020: | | | | | | |
| Switzerland | € | (3.4) | € | 34.2 | € | 30.8 |
| Other | | 0.2 | | (1.5) | | (1.3) |
| Total | € | (3.2) | € | 32.7 | € | 29.5 |
| Year ended December 31, 2019: | | | | | | |
| Switzerland | € | (24.8) | € | (0.9) | € | (25.7) |
| Other | | (0.2) | | (2.6) | | (2.8) |
| Total | € | (25.0) | € | (3.5) | € | (28.5) |

Income tax benefit (expense) attributable to our loss from continuing operations before income taxes differs from the amounts computed using the Dutch income tax rate of 25.0% as a result of the following factors:

| | | Year ended December 31, | | | | | | | |
|--|---|-------------------------|--------|--------|-----|--------|--|--|--|
| | | 2021 | 1 2020 | | 201 | 9 | | | |
| | | in millions | | | | | | | |
| Computed "expected" tax benefit | € | 14.1 | € | 68.1 | € | 34.1 | | | |
| Change in valuation allowances | | 51.0 | | (64.3) | (| (70.1) | | | |
| International rate differences | | (18.3) | | 0.1 | | 6.4 | | | |
| Non-deductible or non-taxable interest and other expenses | | (1.4) | | 28.9 | | (0.6) | | | |
| Basis and other differences in the treatment of items associated with investments in the UPC Holding Group entities. | | 1.2 | | (2.1) | | (1.4) | | | |
| Recognition of previously unrecognized tax benefits | | | | _ | | 1.9 | | | |
| Other, net | | (2.1) | | (1.2) | | 1.2 | | | |
| Total income tax benefit (expense) | € | 44.5 | € | 29.5 | € (| (28.5) | | | |

Over the past three years, there have been several changes to the enacted corporate tax rate in the Netherlands, the most recent of which, in December 2021, increased the corporate income tax rate from 25.0% to 25.8% effective January 1, 2022. The net impact of these income tax rate changes is not significant due to the valuation allowance recorded against these net assets.

The components of our net deferred tax liabilities are as follows:

| | December 31, | | | |
|------------------------------|--------------|-------------|---|---------|
| | | 2021 2 | | 2020 |
| | | in millions | | |
| Deferred tax assets (a) | € | 1.9 | € | 16.9 |
| Deferred tax liabilities (a) | | (353.6) | | (394.6) |
| Net deferred tax liability | € | (351.7) | € | (377.7) |

⁽a) Our deferred tax assets and liabilities are included within other assets, net, and other long-term liabilities, respectively, on our combined balance sheets.

The tax effects of temporary differences that give rise to significant portions of our deferred tax assets and deferred tax liabilities are presented below:

| | December 31, | | | | |
|---|--------------|-------------|---|-----------|--|
| | 2021 | | | 2020 | |
| | | in millions | | | |
| Deferred tax assets: | | | | | |
| Net operating loss and other carryforwards | € | 1,389.3 | € | 1,542.7 | |
| Debt | | 96.6 | | 81.2 | |
| Derivative instruments | | 85.4 | | 95.1 | |
| Leases | | 0.1 | | 113.4 | |
| Other future deductible amounts | | 15.7 | | 39.3 | |
| Deferred tax assets | | 1,587.1 | | 1,871.7 | |
| Valuation allowance | (| 1,525.0) | | (1,677.1) | |
| Deferred tax assets, net of valuation allowance | | 62.1 | | 194.6 | |
| Deferred tax liabilities: | | | | | |
| Intangible assets | | (307.8) | | (350.3) | |
| Property and equipment, net | | (58.2) | | (61.4) | |
| Debt | | (46.3) | | (37.0) | |
| ROU assets | | ` ′ | | | |
| Other future taxable amounts | | (0.1) | | (116.8) | |
| | | (1.4) | | (6.8) | |
| Deferred tax liabilities | | (413.8) | | (572.3) | |
| Net deferred tax liability | € | (351.7) | € | (377.7) | |

Our deferred income tax valuation allowance, including equity items, decreased by \in 152.1 million during 2021. This decrease reflects the net effect of (i) a decrease in deferred tax assets, (ii) net tax expense of \in 51.0 million, (iii) enacted tax law and rate changes and (iv) other individually insignificant items.

The significant components of our tax loss carryforwards and related tax assets at December 31, 2021 are as follows:

| Country | | Tax loss carryforward | | | | | | | | | | | | | | | | | | | | | | | | | | | | elated tax asset | Expiration date |
|-----------------|-----|-----------------------|---|---------|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---------------------|-----------------|
| | | in mi | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| The Netherlands | . € | 4,992.6 | € | 1,288.1 | Indefinite | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Luxembourg | | 403.0 | | 100.5 | Various | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other | | 3.3 | | 0.7 | Various | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | . € | 5,398.9 | € | 1,389.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Our tax loss carryforwards within each jurisdiction combine all companies' tax losses (both capital and ordinary losses) in that jurisdiction, however, certain tax jurisdictions limit the ability to offset taxable income of a separate company or different tax group with the tax losses associated with another separate company or group. Most of the tax losses shown in the above table are not expected to be realized, including certain losses that are limited in use due to change in control or same business tests. In addition, the pre-fiscal unity losses in the Netherlands of the UPCH Fiscal Unity can only be offset with profits that occur within these groups. Losses that relate to the UPCH Fiscal Unity can also be offset against profits of other entities within the LGH Fiscal Unity.

We and our combined entities file combined and standalone income tax returns in various jurisdictions. In the normal course of business, our income tax filings are subject to review by various taxing authorities. In connection with such reviews, disputes could arise with the taxing authorities over the interpretation or application of certain income tax rules related to our

business in that tax jurisdiction. Such disputes may result in future tax and interest and penalty assessments by these taxing authorities. The ultimate resolution of tax contingencies will take place upon the earlier of (i) the settlement date with the applicable taxing authorities in either cash or agreement of income tax positions or (ii) the date when the tax authorities are statutorily prohibited from adjusting the company's tax computations.

In general, tax returns filed by our company or our combined entities for years prior to 2014 are no longer subject to examination by tax authorities. Certain of our subsidiaries are currently involved in income tax examinations in various jurisdictions in which we operate. Any adjustments that might arise from these examinations are not expected to have a material impact on our combined financial position or results of operations.

The changes in our unrecognized tax benefits for the indicated periods are summarized below:

| | 2 | 2021 | | 021 202 | | 2020 | | 2019 |
|--|---|-------|----|----------|---|-------|--|------|
| | | | in | millions | | | | |
| Balance at January 1 | € | 1.0 | € | 0.8 | € | 1.3 | | |
| Additions based on tax positions related to the current year | | _ | | 0.3 | | 0.5 | | |
| Reductions for tax positions of prior years | | (1.0) | | | | (1.1) | | |
| Lapse of statute of limitations | | | | (0.1) | | | | |
| Foreign currency translation | | | | | | 0.1 | | |
| Balance at December 31 | € | | € | 1.0 | € | 0.8 | | |

No assurance can be given that any of these tax benefits will be recognized or realized.

We had no unrecognized tax benefits as of December 31, 2021. As of December 31, 2020 and 2019, all of our unrecognized tax benefits would have a favorable impact on our effective income tax rate if ultimately recognized, after considering amounts that we would expect to be offset by valuation allowances and other factors.

We do not expect any material changes to our unrecognized tax benefits during 2022. No assurance can be given as to the nature or impact of any changes in our unrecognized tax positions during 2022.

(12) Combined Equity (Deficit)

Distributions

During 2019, we made non-cash capital distributions resulting in (i) a \in 1,376.1 million decrease to equity related to the Vodafone Group Distribution and the UPC DTH Distribution and (ii) a \in 1,692.4 million increase to equity related to the net negative carrying value of our investment in the entities that comprise the UPC Transfers.

Contributions

During 2020, we received capital contributions from LGE Financing B.V. (LGE Financing) of \in 3,092.5 million in connection with the Sunrise Acquisition. In addition, we recorded deemed contributions from LG Services B.V. during 2020 and 2019 of \in 8.3 million and \in 9.8 million, respectively.

As further described in note 13, we recorded charges from another subsidiary of Liberty Global during 2020 and 2019 of €46.1 million and €12.6 million, respectively, related to the contribution of technology-related services, which are reflected as deemed contributions in our combined statements of equity (deficit).

(13) Related-party Transactions

Our related-party transactions are as follows:

| | Year ended December 31, | | | | | |
|---|-------------------------|-----------|-----------|--|--|--|
| | 2021 | 2020 | 2019 | | | |
| | | | | | | |
| Credits (charges) included in: | | | | | | |
| Revenue € | 1.5 | € 1.1 | € 2.2 | | | |
| Programming and other direct costs of services | (5.6) | (9.2) | (6.8) | | | |
| Other operating | (11.6) | (15.0) | (25.1) | | | |
| SG&A | (13.8) | (6.2) | (11.7) | | | |
| Direct acquisition costs | (2.6) | (23.4) | (0.4) | | | |
| Allocated share-based compensation expense | (20.9) | (19.7) | (20.4) | | | |
| Fees and allocations, net: | | | | | | |
| Operating and SG&A (exclusive of depreciation and share-based compensation) | (12.2) | (4.1) | 4.6 | | | |
| Depreciation | (70.9) | (102.7) | (69.5) | | | |
| Share-based compensation | (34.2) | (18.8) | (22.5) | | | |
| Management fee | (42.8) | (37.7) | (34.6) | | | |
| Total fees and allocations, net | (160.1) | (163.3) | (122.0) | | | |
| Included in operating income | (213.1) | (235.7) | (184.2) | | | |
| Interest expense | (6.0) | _ | (47.3) | | | |
| Interest income | 0.1 | 8.3 | 11.1 | | | |
| Included in net earnings (loss) $\overline{\epsilon}$ | (219.0) | € (227.4) | € (220.4) | | | |
| Property and equipment transfers, net $\underline{\epsilon}$ | 10.7 | € 1.5 | € 28.0 | | | |

General. The UPC Holding Group charges fees and allocates costs and expenses to certain other Liberty Global subsidiaries and certain Liberty Global subsidiaries outside of the UPC Holding Group charge fees and allocate costs and expenses to the UPC Holding Group. Depending on the nature of these related-party transactions, the amount of the charges or allocations 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. The methodology Liberty Global uses to allocate its central and administrative costs to its borrowing groups impacts the calculation of the "EBITDA" metric specified by our debt agreements (Covenant **EBITDA**). In this regard, the components of related-party fees and allocations that are deducted to arrive at our Covenant EBITDA are based on (a) the amount and nature of costs incurred by the allocating Liberty Global subsidiaries during the period, (b) the allocation methodologies in effect during the period and (c) the size of the overall pool of entities that are charged fees and allocated costs, such that changes in any of these factors would likely result in changes to the amount of related-party fees and allocations that will be deducted to arrive at our Covenant EBITDA in future periods. For example, to the extent that a Liberty Global subsidiary borrowing group was to acquire (sell) an operating entity, and assuming no change in the total costs incurred by the allocating entities, the fees charged and the costs allocated to our company would decrease (increase). Although we believe that the related-party charges and allocations described below are reasonable, no assurance can be given that the related-party costs and expenses reflected in our combined statements of operations are reflective of the costs that we would incur on a standalone basis.

Revenue. Amounts primarily relate to B2B related services and network maintenance services provided to certain affiliates outside of the UPC Holding Group.

Programming and other direct costs of services. Amounts represent certain cash settled charges from other Liberty Global subsidiaries and affiliates to the UPC Holding Group for programming-related and interconnect services provided to our company.

Other operating expenses. Amounts include certain charges, which may be cash or loan settled, between Liberty Global subsidiaries and the UPC Holding Group, primarily for network-related services and other items.

SG&A expenses. Amounts represent certain charges, which may be cash or loan settled, between Liberty Global subsidiaries and the UPC Holding Group, primarily for information technology-related services and software maintenance services.

Allocated share-based compensation expense. Amounts are allocated to our company by Liberty Global subsidiaries and represent share-based compensation expense associated with the Liberty Global share-based incentive awards held by certain employees of our combined entities. Share-based compensation expense is included in SG&A expenses in our combined statements of operations.

Fees and allocations, net. These amounts, which are based on our company's estimated share of the applicable costs (including personnel-related and other costs associated with the services provided) incurred by Liberty Global subsidiaries, represent the aggregate net effect of charges between our company and various Liberty Global subsidiaries that are outside of our company. These charges generally relate to management, finance, legal and other services that support our company's operations. The categories of our fees and allocations, net, are as follows:

- Operating and SG&A (exclusive of depreciation and share-based compensation). The amounts included in this category, which may be cash or loan settled, represent charges between our company and other Liberty Global subsidiaries for certain management, marketing, finance and other operating and SG&A expenses incurred by our company and other Liberty Global subsidiaries, whose activities benefit multiple operations, including operations within and outside of the UPC Holding Group. Amounts represent the charge to or from our company based on our estimated share of the actual costs incurred by our company or other Liberty Global subsidiaries, without a mark-up. Amounts in this category are generally deducted to arrive at our Covenant EBITDA.
- Depreciation. The amounts included in this category, which may be cash or loan settled, represent our estimated share of depreciation of assets not owned by our company. The amounts allocated represent our estimated share of the actual costs incurred by Liberty Global subsidiaries, without a mark-up.
- Share-based compensation. The amounts included in this category, which may be cash or loan settled, represent our estimated share of share-based compensation associated with Liberty Global employees who are not employees of our company. The amounts allocated represent our estimated share of the actual costs incurred by Liberty Global subsidiaries, without a mark-up.
- Management fee. The amounts included in this category, which may be cash or loan settled, represent our estimated allocable share of (i) operating and SG&A expenses related to stewardship services provided by certain Liberty Global subsidiaries and (ii) the mark-up, if any, applicable to each category of the related-party fees and allocations charged to our company.

Technology-based charges. Liberty Global charges technology-based fees to our company. Prior to July 1, 2020, such charges were calculated using a royalty-based method (the **Royalty-based Method**). To the extent that our proportional share of the technology-based costs was more than the actual amounts charged under the Royalty-based Method, such excess amounts were reflected as deemed contributions of technology-related services in our combined statements of equity (deficit). During the six months ended June 30, 2020 and year ended 2019, our proportional share of the technology-based costs, including amounts related to UPC Poland, was €22.8 million and €5.0 million more than the actual amount charged under the Royalty-based Method, respectively. During the remaining 2020 period, we recorded a €23.3 million adjustment to the excess amounts that were reflected as deemed contributions of technology-related services in our combined statement of equity (deficit) related to the first six months of 2020, including amounts related to UPC Poland.

Under the Royalty-based Method, any excess amounts we were charged that exceeded our proportional share of the technology-based costs were classified as management fees and were added back to arrive at Covenant EBITDA.

Effective July 1, 2020, the Royalty-based Method was terminated and replaced with a new method whereby the technology-based fees charged by Liberty Global to our company are now based on our estimated share of the underlying costs plus a mark-up (the **Cost Plus Method**). The portion of the charge representing the mark-up is reflected as a capital charge for

technology-related services in our combined statements of equity (deficit). For 2021 and the period July 1, 2020 through December 31, 2020, our estimated share of the technology-based costs, including amounts related to UPC Poland, resulted in capital charges of \in 9.1 million and \in 4.3 million, respectively, related to the associated mark-up. In addition, in connection with the July 1, 2020 change to the Cost Plus Method, we were charged a one-time transfer pricing transition fee of \in 204.6 million, which is reflected in our combined statement of equity (deficit) for the year ended December 31, 2020.

Interest expense. Amounts primarily relate to interest accrued on the Shareholder Loan (as defined and described below). Interest expense is accrued and included in other long-term liabilities during the year, and then added to the Shareholder Loan balance at the end of the year. In addition, the 2019 amount includes interest accrued on amounts owed to LG Services B.V. and UPC France that, prior to the UPC Transfers, were eliminated in combination.

Interest income. Amounts primarily include interest accrued on the LGEF Receivable (as defined and described below). Interest income is accrued and included in long-term interest receivable during the year, and then added to the LGEF Receivable balance at the beginning of the following year. In addition, the 2019 amount includes interest income related to receivables from LG Services B.V. and UPC France that, prior to the UPC Transfers, were eliminated in combination.

Property and equipment transfers, net. These amounts, which are generally cash settled, include the net carrying values of (i) construction in progress, including certain capitalized labor, transferred to or acquired from other Liberty Global subsidiaries, (ii) customer premises equipment acquired from other Liberty Global subsidiaries outside of the UPC Holding Group, which centrally procure equipment on behalf of our company and various other Liberty Global subsidiaries and (iii) used customer premises and network-related equipment acquired from or transferred to other Liberty Global subsidiaries outside of the UPC Holding Group.

The following table provides details of our related-party balances:

| | 2021 | | |
|-----------------------------|-------------|------|----------|
| <u> </u> | 2021 | 2020 | <u> </u> |
| | in millions | | |
| Assets: | | | |
| Current receivables (a) € | 9.9 | € : | 18.3 |
| LGEF Receivable (b) | 73.6 | | _ |
| Total <u>€</u> | 83.5 | € | 18.3 |
| | | | |
| Liabilities: | | | |
| Accounts payable € | 29.7 | € 2 | 20.9 |
| Accrued liabilities | 57.8 | (| 69.8 |
| Shareholder Loan (c) | _ | (| 67.6 |
| Other long-term liabilities | 0.3 | | 0.3 |
| Total € | 87.8 | € 1: | 58.6 |

⁽a) Amounts primarily include (i) as of December 31, 2021, €4.4 million and €2.5 million of receivables due from Liberty Global Technology Services B.V. and Liberty Global Corporate B.V., respectively, (ii) €1.2 million and €10.9 million, respectively, of receivables due from Liberty Global B.V. and (iii) as of December 31, 2020, €4.9 million of receivables due from Liberty Global Services B.V. These receivables are non-interest bearing, may be cash or loan settled and are included within trade receivables, net and related-party receivables on our combined balance sheets.

⁽b) UPC Holding has a related-party receivable (the **LGEF Receivable**) due from LGE Financing. The LGEF Receivable bears interest at a rate of 5.96% and matures on January 1, 2029. Accrued interest on the LGEF Receivable is transferred to the receivable balance at the beginning of each year. The net increase in the LGEF Receivable during 2021 included (i) a €179.8 million increase related to the non-cash transfer of the net asset balance from the Shareholder Loan (as defined below), (ii) cash receipts of €165.7 million, (iii) cash advances of €112.4 million and (iv) a €52.9 million decrease related to non-cash settlements. During 2020, changes in the LGEF Receivable included (a) cash receipts of

€1,777.1 million, (b) cash advances of €1,749.6 million, (c) a €362.9 million decrease related to non-cash settlements, (d) additions of €8.6 million in non-cash accrued interest and (e) a €134.1 million increase related to the non-cash transfer of the net liability balance to the Shareholder Loan. During 2019, changes in the LGEF Receivable included (1) cash receipts of €1,822.3 million, (2) cash advances of €1,599.3 million, (3) a €292.0 million increase related to non-cash settlements and (4) additions of €5.3 million in non-cash accrued interest.

(c) UPC Holding has an unsecured shareholder loan (the **Shareholder Loan**) with LGE Financing, which, as amended, matures in 2030 and is subordinated in right of payment to the prior payment in full of the UPC Holding Senior Notes in the event of (i) a total or partial liquidation, dissolution or winding up of UPC Holding, (ii) a bankruptcy, reorganization, insolvency, receivership or similar proceeding relating to UPC Holding or its property, (iii) an assignment for the benefit of creditors or (iv) any marshaling of UPC Holding's assets or liabilities. The interest rate on the Shareholder Loan is a fixed rate of 4.18% and accrued interest is included in other long-term liabilities until it is transferred to the loan balance at the end of each year. The net decrease in the Shareholder Loan during 2021 included (a) cash repayments of €2,322.9 million, including €6.0 million of interest, (b) cash borrowings of €1,902.3 million, (c) a €167.2 million increase related to non-cash settlements, (d) additions of €6.0 million in non-cash accrued interest and (e) a €179.8 million increase related to the non-cash transfer of the net asset balance to the LGEF Receivable. During 2020, changes in the Shareholder Loan included (1) a €134.1 million increase related to the non-cash transfer of the net liability balance from the LGEF Receivable, (2) cash repayments of €72.6 million and (3) cash borrowings of €6.1 million. During 2019, changes in the Shareholder Loan included (I) cash borrowings of €1,791.6 million, (II) cash repayments of €267.0 million, (III) a €92.5 million increase related to non-cash settlements and (IV) the non-cash settlement of €1,617.1 million of the Shareholder Loan and €25.1 million of outstanding accrued interest by converting these amounts to equity. During 2020 and 2019, none of our Shareholder Loan repayments represented payments of interest.

During 2021, 2020 and 2019, we recorded aggregate capital charges of €18.3 million, €5.4 million and €8.6 million, respectively, in our combined statements of equity (deficit) in connection with the exercise of Liberty Global share appreciation rights and the vesting of Liberty Global restricted share units and performance-based restricted share units held by employees of our combined entities, including amounts related to UPC Poland. We and Liberty Global have agreed that these capital charges will be based on the fair value of the underlying Liberty Global shares associated with share-based incentive awards that vest or are exercised during the period, subject to any reduction that is necessary to ensure that the capital charge does not exceed the amount of share-based compensation expense recorded by our company with respect to Liberty Global share-based incentive awards.

(14) Defined Benefit Plans

Certain of our combined entities maintain various funded and unfunded defined benefit plans for their employees. The table below provides summary information on our defined benefit plans:

| | Year ended December 31, | | | | | | | | | |
|-------------------------------|-------------------------|-------|---|-------|---|-------|--|--|--|--|
| | | 2021 | | 2020 | | 2019 | | | | |
| | | | | | | | | | | |
| Projected benefit obligation | € | 904.1 | € | 865.2 | € | 373.8 | | | | |
| Fair value of plan assets (a) | € | 890.9 | € | 782.3 | € | 364.9 | | | | |
| Net liability | € | 13.2 | € | 82.9 | € | 8.9 | | | | |

⁽a) The fair value of plan assets at December 31, 2021 includes €819.9 million and €71.0 million of assets that are valued based on Level 1 and Level 2 inputs, respectively, of the fair value hierarchy (as further described in note 7). Our plan assets comprise investments in debt securities, equity securities, real estate and certain other assets.

Our net periodic pension cost was \in 4.5 million, \in 5.9 million and \in 4.9 million during 2021, 2020 and 2019, respectively, including \in 33.0 million, \in 16.9 million and \in 10.5 million, respectively, representing the service cost component. The 2021 amount excludes an aggregate curtailment gain of \in 6.4 million, which is included in impairment, restructuring and other operating items, net, in our combined statement of operations.

During 2021, contributions to our defined benefit plans aggregated €31.0 million. Based on December 31, 2021 exchange rates and information available as of that date, we expect this amount to be €20.6 million in 2022.

(15) Accumulated Other Comprehensive Earnings

Accumulated other comprehensive earnings included on our combined balance sheets and statements of equity (deficit) reflect the aggregate impact of foreign currency translation adjustments and pension-related adjustments and other. The changes in the components of accumulated other comprehensive earnings, net of taxes, are summarized below. Except as noted below, we are not required to provide income taxes on amounts recorded in other comprehensive earnings (loss) for the periods presented.

| | | Parent entities | | Total | |
|------------------------------|--|---|--|----------------------------------|---|
| | Foreign currency translation adjustments | Pension-related adjustments and other (a) | Accumulated other comprehensive earnings | Non- controlling interests | combined accumulated other comprehensive earnings |
| | | | in millions | | |
| Balance at January 1, 2019 | € 805.6 | € (22.1) | € 783.5 | € 0.8 | € 784.3 |
| Other comprehensive earnings | 92.5 | (3.1) | 89.4 | | 89.4 |
| Balance at December 31, 2019 | 898.1 | (25.2) | 872.9 | 0.8 | 873.7 |
| Other comprehensive loss | (40.6) | (17.3) | (57.9) | | (57.9) |
| Balance at December 31, 2020 | 857.5 | (42.5) | 815.0 | 0.8 | 815.8 |
| Other comprehensive earnings | 106.4 | 38.0 | 144.4 | _ | 144.4 |
| Balance at December 31, 2021 | € 963.9 | € (4.5) | € 959.4 | € 0.8 | € 960.2 |

⁽a) The pension related adjustments included in other comprehensive earnings (loss) are net of income tax benefit (expense) of (€8.2 million), €3.7 million and €0.7 million for the years ended December 31, 2021, 2020 and 2019, respectively.

(16) Commitments and Contingencies

Commitments

In the normal course of business, we enter into agreements that commit our company to make cash payments in future periods with respect to programming contracts, purchases of customer premises and other equipment and services, network and connectivity commitments and other items. The following table sets forth the euro equivalents of such commitments as of December 31, 2021. The commitments included in this table do not reflect any liabilities that are included on our December 31, 2021 combined balance sheet:

| _ | Payments due during: | | | | | | | | | | | | |
|--------------------------------------|----------------------|---|-------|---|------|----|----------|---|------|------------|---|-------|--|
| | 2022 | | 2023 | | 2024 | | 2025 | | 2026 | Thereafter | | Total | |
| | | | | | | in | millions | | | | | | |
| D | | | | _ | | | | | | | _ | | |
| Programming commitments | € 33.6 | € | 34.3 | € | 32.2 | € | 30.5 | € | 28.9 | € 14.5 | € | 174.0 | |
| Purchase commitments | 107.9 | | 31.4 | | 1.6 | | | | | | | 140.9 | |
| Network and connectivity commitments | 58.7 | | 18.5 | | 11.3 | | 10.7 | | 4.1 | 24.6 | | 127.9 | |
| Other commitments | 64.5 | | 47.3 | | 24.2 | | 24.9 | | 24.9 | 106.7 | | 292.5 | |
| Total | € 264.7 | € | 131.5 | € | 69.3 | € | 66.1 | € | 57.9 | € 145.8 | € | 735.3 | |

Programming commitments consist of obligations associated with certain of our programming and sports rights contracts that are enforceable and legally binding on us as we have agreed to pay minimum fees without regard to (i) the actual number of subscribers to the programming services, (ii) whether we terminate service to a portion of our subscribers or dispose of a portion of our distribution systems or (iii) whether we discontinue our premium sports services. Programming commitments do not include increases in future periods associated with contractual inflation or other price adjustments that are not fixed. Accordingly, the amounts reflected in the above table with respect to these contracts are significantly less than the amounts we expect to pay in these periods under these contracts. Historically, payments to programming vendors have represented a significant portion of our operating costs, and we expect this will continue to be the case in future periods. In this regard, our total programming and copyright costs aggregated €55.8 million, €58.9 million and €61.8 million during 2021, 2020 and 2019, respectively.

Purchase commitments include unconditional and legally binding obligations related to (i) the purchase of customer premises and other equipment and (ii) certain service-related commitments, including information technology and maintenance services.

Network and connectivity commitments include commitments associated with (i) network maintenance commitments, (ii) fiber leasing agreements and (iii) commitments associated with our mobile virtual network operator (MVNO) agreements. Amounts related to certain of our MVNO commitments represent fixed minimum amounts payable under these agreements and, therefore, may be significantly less than the actual amounts we ultimately pay in future periods.

In addition to the commitments set forth in the table above, we have significant commitments under (i) derivative instruments and (ii) defined benefit plans and similar agreements, pursuant to which we expect to make payments in future periods. For information regarding our derivative instruments, including the net cash paid or received in connection with these instruments during 2021, 2020 and 2019, see note 6. For information regarding our defined benefit plans, see note 14.

We also have commitments pursuant to agreements with, and obligations imposed by, franchise authorities and municipalities, which may include obligations in certain markets to move aerial cable to underground ducts or to upgrade, rebuild or extend portions of our broadband communication systems. Such amounts are not included in the above table because they are not fixed or determinable.

Guarantees and Other Credit Enhancements

In the ordinary course of business, we may provide (i) indemnifications to our lenders, our vendors and certain other parties and (ii) performance and/or financial guarantees to local municipalities, our customers and vendors. Historically, these arrangements have not resulted in our company making any material payments and we do not believe that they will result in material payments in the future.

Other Regulatory Matters

Broadband internet, video distribution, fixed-line telephony, mobile and content businesses are regulated in each of the countries in which we operate. The scope of regulation varies from country to country, although in some significant respects regulation in European markets is harmonized under the regulatory structure of the European Union (E.U.). Adverse regulatory developments could subject our businesses to a number of risks. Regulation, including conditions imposed on us by competition or other authorities as a requirement to close acquisitions or dispositions, could limit growth, revenue and the number and types of services offered and could lead to increased operating costs and property and equipment additions. Regulation may also restrict our operations and subject them to further competitive pressure, including pricing restrictions, interconnect and other access obligations, and restrictions or controls on content, including content provided by third parties. Failure to comply with current or future regulation could expose our businesses to various penalties.

In addition to the foregoing items, we have contingent liabilities related to matters arising in the ordinary course of business, including (i) legal proceedings, (ii) issues involving VAT and wage, property, withholding and other tax issues and (iii) disputes over interconnection, programming, copyright and channel carriage fees. While we generally expect that the amounts required to satisfy these contingencies will not materially differ from any estimated amounts we have accrued, no assurance can be given that the resolution of one or more of these contingencies will not result in a material impact on our results of operations, cash flows or financial position in any given period. Due, in general, to the complexity of the issues involved and, in certain cases, the lack of a clear basis for predicting outcomes, we cannot provide a meaningful range of potential losses or cash outflows that might result from any unfavorable outcomes.

(17) Segment Reporting

We generally identify our reportable segments as those operating entities that represent 10% or more of our revenue, Segment Adjusted EBITDA (as defined below) or total assets. In certain cases, we may elect to include an operating segment in our segment disclosure that does not meet the above-described criteria for a reportable segment. We evaluate performance and make decisions about allocating resources to our operating segments based on financial measures such as revenue and Segment Adjusted EBITDA. In addition, we review non-financial measures such as customer growth, as appropriate.

Segment 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, "Segment Adjusted EBITDA" is defined as earnings (loss) from continuing operations before net income tax benefit (expense), other non-operating income or expenses, net gains (losses) on debt extinguishment, net foreign currency gains (losses), net gains (losses) on derivative instruments, interest expense, depreciation and amortization, share-based compensation, related-party fees and allocations, 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 Segment 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. A reconciliation of earnings or loss from continuing operations to Segment Adjusted EBITDA is presented below.

As of December 31, 2021, our reportable segments are as follows:

- Switzerland
- · Central and Other

On September 22, 2021, we entered into an agreement to sell our operations in Poland (see note 5). Accordingly, segment information for all periods has been retrospectively revised to present our operating segment in Poland as a discontinued operation. Previously, our operations in Poland, together with our operations in Slovakia, were included in our former "Central and Eastern Europe" reportable segment. As a result of this change, our operations in Slovakia are now included in our "Central and Other" category (previously referred to as "Central and Corporate"), which primarily includes (i) our operations in Slovakia, (ii) certain centralized functions and (iii) intersegment eliminations, when applicable, for all periods presented.

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

Performance Measures of Our Reportable Segments

| | | Year ended December 31, | | | | | | | | | | | | |
|-----------------------|---|-------------------------|----|------------------------------|---------------------------------------|---------|----|---------|------|-------------------------------|---|-------|--|--|
| | | 20 | 21 | | | 20 | 20 | | 2019 | | | | | |
| | I | Revenue | A | Segment Adjusted BITDA | Segment Adjusted Revenue EBITDA | |] | Revenue | A | Segment Adjusted EBITDA | | | | |
| | | | | | in millions | | | | | | | | | |
| Switzerland | € | 2,808.2 | € | 1,022.3 | € | 1,365.2 | € | 603.2 | € | 1,124.4 | € | 560.7 | | |
| Central and Other (a) | | 43.9 | | 17.9 | | 44.4 | | 18.0 | | 44.3 | | 15.7 | | |
| Total | € | 2,852.1 | € | 1,040.2 | € | 1,409.6 | € | 621.2 | € | 1,168.7 | € | 576.4 | | |
| I otal | ŧ | 2,852.1 | € | 1,040.2 | € | 1,409.6 | € | 621.2 | € | 1,168.7 | € | 5/6.4 | | |

(a) Amounts include transactions between our continuing and discontinued operations.

The following table provides a reconciliation of loss from continuing operations to Segment Adjusted EBITDA:

| | | Year ended December 31, | | | | | | |
|---|---|-------------------------|-------------|---------|---|---------|--|--|
| | | 2021 | 20 | 20 | | 2019 | | |
| | | | in millions | | | | | |
| Loss from continuing operations | € | (11.8) | € (| (242.8) | € | (164.8) | | |
| Income tax expense (benefit) | | (44.5) | - (| (29.5) | | 28.5 | | |
| Other income, net | | (30.7) | | (19.9) | | (19.7) | | |
| Losses on debt extinguishment, net | | 75.1 | | 40.5 | | 13.8 | | |
| Foreign currency transaction losses (gains), net | | (26.6) | (| (140.6) | | 74.7 | | |
| Realized and unrealized losses (gains) on derivative instruments, net | | (180.4) | | 264.1 | | (27.5) | | |
| Interest expense | | 253.7 | | 168.9 | | 268.5 | | |
| Operating income | | 34.8 | | 40.7 | | 173.5 | | |
| Impairment, restructuring and other operating items, net | | (56.1) | | 44.6 | | 11.7 | | |
| Depreciation and amortization | | 880.5 | | 352.9 | | 248.8 | | |
| Related-party fees and allocations, net | | 160.1 | | 163.3 | | 122.0 | | |
| Share-based compensation expense | | 20.9 | | 19.7 | | 20.4 | | |
| Segment Adjusted EBITDA | € | 1,040.2 | € | 621.2 | € | 576.4 | | |

Balance Sheet Data of our Reportable Segments

Selected balance sheet data of our reportable segments is set forth below:

| | | Long-lived assets | | | | Total | assets | | |
|-------------------|---|-------------------|-------|----------|---------|----------|--------|----------|--|
| | | December 31, | | | Decembe | | | ber 31, | |
| | | 2021 2020 | | | 2021 | | | 2020 | |
| | | | in mi | llio | ns | | | | |
| Switzerland | € | 10,129.2 | € | 10,027.2 | € | 12,133.7 | € | 11,993.0 | |
| Central and Other | | 108.5 | | 114.1 | | 1,276.4 | | 1,310.3 | |
| Total | € | 10,237.7 | € | 10,141.3 | € | 13,410.1 | € | 13,303.3 | |

Property and Equipment Additions of our Reportable Segments

The property and equipment additions of our reportable segments (including capital additions financed under capital-related vendor financing or finance lease arrangements) are presented below and reconciled to the capital expenditure amounts included in our combined statements of cash flows. For additional information concerning capital additions financed under vendor financing and finance lease arrangements, see notes 8 and 10, respectively.

| | Year ended December 31, | | | | | | | |
|--|-------------------------|---------|----|----------|---|---------|--|--|
| | | 2021 | | 2020 | | 2019 | | |
| | | | in | millions | | _ | | |
| Switzerland | € | 517.6 | € | 263.0 | € | 248.3 | | |
| Central and Other | | 10.0 | | 12.1 | | 10.7 | | |
| Total property and equipment additions | | 527.6 | | 275.1 | | 259.0 | | |
| Assets acquired under capital-related vendor financing arrangements | | (207.8) | | (281.9) | | (390.8) | | |
| Assets acquired under finance leases | | (1.7) | | (1.2) | | (2.9) | | |
| Changes in current liabilities related to capital expenditures (including related-party amounts) | | (22.8) | | 159.3 | | 331.0 | | |
| Total capital expenditures, net | € | 295.3 | € | 151.3 | € | 196.3 | | |

Revenue by Major Category

Our revenue by major category is set forth below:

| | Year ended December 31, | | | | | | | |
|----------------------------------|-------------------------|---------|----|------------|---|---------|--|--|
| | | 2021 | | 2020 | | 2019 | | |
| | | | iı | n millions | | | | |
| Residential revenue: | | | | | | | | |
| Residential fixed revenue (a): | | | | | | | | |
| Subscription revenue (b): | | | | | | | | |
| Broadband internet | € | 516.2 | € | 329.5 | € | 311.7 | | |
| Video | | 466.1 | | 425.1 | | 438.1 | | |
| Fixed-line telephony | | 156.0 | | 96.2 | | 90.5 | | |
| Total subscription revenue | | 1,138.3 | | 850.8 | | 840.3 | | |
| Non-subscription revenue | | 65.9 | | 89.1 | | 75.8 | | |
| Total residential fixed revenue | | 1,204.2 | | 939.9 | | 916.1 | | |
| Residential mobile revenue (c): | | | | | | | | |
| Subscription revenue (b) | | 811.6 | | 178.3 | | 58.8 | | |
| Non-subscription revenue | | 299.8 | | 70.1 | | 27.2 | | |
| Total residential mobile revenue | | 1,111.4 | | 248.4 | | 86.0 | | |
| Total residential revenue | | 2,315.6 | | 1,188.3 | | 1,002.1 | | |
| B2B revenue (d): | | | | | | | | |
| Subscription revenue | | 115.6 | | 36.6 | | 23.3 | | |
| Non-subscription revenue | | 399.9 | | 177.4 | | 140.6 | | |
| Total B2B revenue | | 515.5 | | 214.0 | | 163.9 | | |
| Other revenue | | 21.0 | | 7.3 | | 2.7 | | |
| Total | € | 2,852.1 | € | 1,409.6 | € | 1,168.7 | | |

- (a) Residential fixed subscription revenue includes amounts received from subscribers for ongoing services and the recognition of deferred installation revenue over the associated contract period. Residential fixed non-subscription revenue includes, among other items, channel carriage fees, late fees and revenue from the sale of equipment.
- (b) Residential subscription revenue from subscribers who purchase bundled services at a discounted rate is generally allocated proportionally to each service based on the standalone price for each individual service. As a result, changes in the standalone pricing of our fixed and mobile products or the composition of bundles can contribute to changes in our product revenue categories from period to period.
- (c) Residential mobile subscription revenue includes amounts received from subscribers for ongoing services. Residential mobile non-subscription revenue includes, among other items, interconnect revenue and revenue from sales of mobile handsets and other devices.
- (d) B2B subscription revenue represents revenue from (i) services provided to certain small or home office (**SOHO**) subscribers and (ii) mobile services provided to medium and large enterprises. SOHO subscribers pay a premium price to receive expanded service levels along with broadband internet, video, fixed-line telephony or mobile services that are the same or similar to the mass marketed products offered to our residential subscribers. B2B non-subscription revenue includes revenue from business broadband internet, video, fixed-line telephony and data services offered to medium and large enterprises and, on a wholesale basis, to other operators.

Geographic Segments

The revenue of our geographic segments is set forth below:

| | Year ended December 31, | | | | | | | | |
|--|-------------------------|-----------------------|---|---------|---|---------|--|--|--|
| | | 2021 2020 in millions | | | | 2019 | | | |
| | | | | | | | | | |
| Switzerland | € | 2,808.2 | € | 1,365.2 | € | 1,124.4 | | | |
| Slovakia | | 44.2 | | 44.4 | | 44.4 | | | |
| Other, including intersegment eliminations | | (0.3) | | _ | | (0.1) | | | |
| Total | € | 2,852.1 | € | 1,409.6 | € | 1,168.7 | | | |

The long-lived assets of our geographic segments are set forth below:

| | | Decem | ber | 31, |
|-------------|---|----------|-------|----------|
| | | 2021 | | 2020 |
| | | in mi | illio | ns |
| Switzerland | € | 10,129.2 | € | 10,027.2 |
| Slovakia | | 108.5 | | 110.9 |
| Other | | _ | | 3.2 |
| Total | € | 10,237.7 | € | 10,141.3 |

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis, which should be read in conjunction with our combined financial statements, is intended to assist in providing an understanding of our results of operations and financial condition and is organized as follows:

- Overview. This section provides a general description of our business and recent events.
- Results of Operations. This section provides an analysis of our results of operations for the years ended December 31, 2021 and 2020.
- Liquidity and Capital Resources. This section provides an analysis of our liquidity and combined statements of cash flows.
- Critical Accounting Policies, Judgments and Estimates. This section discusses those material accounting policies that involve uncertainties and require significant judgment in their application.

The capitalized terms used below have been defined in the notes to our combined financial statements. In the following text, the terms, "we," "our," "our company" and "us" refer to the UPC Holding Group.

Unless otherwise indicated, convenience translations into euros are calculated as of December 31, 2021.

Included below is an analysis of our results of operations and cash flows for 2021, as compared to 2020. An analysis of our results of operations and cash flows for 2020, and compared to 2019, can be found in our *Management's Discussion and Analysis of Financial Condition and Results of Operations* included in Part II of our 2020 annual report.

Overview

General

We are an international provider of broadband internet, video, fixed-line telephony and mobile communications services to residential customers and businesses in Europe. Our continuing operations comprise businesses that provide residential and B2B communications services in Switzerland and Slovakia.

In addition, we currently provide residential and B2B communications services in Poland. On September 22, 2021, we entered into an agreement to sell our operations in Poland. Accordingly, our operations in Poland are reflected as discontinued operations for all periods presented. In the following discussion and analysis, the operating statistics, results of operations, cash flows and financial condition that we present and discuss are those of our continuing operations, unless otherwise indicated. For additional information regarding the pending sale of UPC Poland, including with respect to our current expectations on timing and use of proceeds, see note 5 to our combined financial statements.

Operations

Our company delivers market-leading products through next-generation networks that connect our customers to broadband, internet, video, fixed-line telephony and mobile services. At December 31, 2021, our continuing operations owned and operated networks that passed 3,117,300 homes and served 1,665,600 fixed-line customers and 2,610,300 mobile subscribers.

Broadband internet services. We offer multiple tiers of broadband internet service up to Gigabit speeds depending on location. We continue to invest in new technologies that allow us to increase the internet speeds we offer to our customers.

Video services. We provide video services, including various enhanced products that enable our customers to control when they watch their programming. These products range from digital video recorders to multimedia home gateway systems capable of distributing video, voice and data content throughout the home and to multiple devices.

Fixed-line telephony services. We offer fixed-line telephony services via either voice-over-internet-protocol or "VoIP" technology or circuit-switched telephony, depending on location.

Mobile services. We offer voice and data mobile services, either over our own networks or as a MVNO over third-party networks, depending on location. In addition, we generate revenue from the sale of mobile handsets.

B2B services. Our B2B services include broadband internet, voice, data, video, wireless and cloud services.

For additional information regarding the details of our products and services, see *Business* included in Part I of this annual report.

Impact of COVID-19

The global COVID-19 pandemic continues to impact the economies of the countries in which we operate. However, during 2021, the impact on our company continued to be relatively minimal as demand for our products and services remained strong. It is not currently possible to estimate the duration and severity of the COVID-19 pandemic or the adverse economic impact resulting from the preventative measures taken to contain or mitigate its outbreak, therefore no assurance can be given that an extended period of global economic disruption would not have a material adverse impact on our business, financial condition and results of operations in future periods. For additional information regarding the impact of COVID-19 on our results of operations during 2021 and 2020, see *Discussion and Analysis of our Reportable Segments* below.

Strategy and Management Focus

We strive to achieve organic revenue and customer growth in our operations by developing and marketing bundled entertainment and information and communications services, and extending and upgrading the quality of our networks where appropriate. As we use the term, organic growth excludes foreign currency translation effects (**FX**) and the estimated impact of acquisitions and dispositions. While we seek to increase our customer base, we also seek to maximize the average revenue we receive from each household by increasing the penetration of our broadband internet, digital video, fixed-line telephony and mobile services with existing customers through product bundling and upselling.

Competition and Other External Factors

We are experiencing competition in all of the markets in which we operate. This competition, together with macroeconomic and regulatory factors, has adversely impacted our revenue, number of customers and/or average monthly subscription revenue per fixed-line customer or mobile subscriber, as applicable (ARPU). For additional information regarding the competition we face, see *Business — Competition* and *Regulatory Matters* included in Part I of this annual report. For additional information regarding the revenue impact of changes in the fixed-line customers and ARPU of our reportable segments, see *Discussion and Analysis of our Reportable Segments* below.

Results of Operations

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

Changes in foreign currency exchange rates have a significant impact on our reported operating results as most of our operating segments have functional currencies other than the euro. Our primary exposure to FX risk during the three months ended December 31, 2021 was to the Swiss franc, as 98.5% of our euro revenue during such period was derived from our combined entities whose functional currencies are those other than the euro. The portions of the changes in the various components of our results of operations that are attributable to changes in FX are highlighted under *Discussion and Analysis of our Reportable Segments* and *Discussion and Analysis of our Combined Operating Results* below.

Discussion and Analysis of our Reportable Segments

General

Our reportable segments derive their revenue primarily from residential and B2B communications services. For detailed information regarding the composition of our reportable segments and how we define and categorize our revenue components, see note 17 to our combined financial statements.

The tables presented below in this section provide the details of the revenue and Segment Adjusted EBITDA of our combined reportable segments for 2021, as compared to 2020. These tables present (i) the amounts reported for the current and comparative periods, (ii) the reported euro and percentage change from period to period and (iii) the organic percentage change from period to period. The comparisons that exclude FX assume that exchange rates remained constant at the prior-period rate during all periods presented. We also provide a table showing the Segment Adjusted EBITDA margins of our combined reportable segments for 2021 and 2020 at the end of this section.

All of our revenue is derived from jurisdictions that administer VAT or similar revenue-based taxes. Any increases in these taxes could have an adverse impact on our ability to maintain or increase our revenue to the extent that we are unable to pass such tax increases on to our customers. In the case of revenue-based taxes for which we are the ultimate taxpayer, we will also experience increases in our operating costs and expenses and corresponding declines in our Segment Adjusted EBITDA and Segment Adjusted EBITDA margins to the extent of any such tax increases.

We pay interconnection fees to other telephony providers when calls or text messages from our subscribers terminate on another network, and we receive similar fees from such providers when calls or text messages from their customers terminate on our networks or networks that we access through MVNO or other arrangements. The amounts we charge and incur with respect to fixed-line telephony and mobile interconnection fees are subject to regulatory oversight. To the extent that regulatory authorities introduce fixed-line or mobile termination rate changes, we would experience prospective changes and, in very limited cases, we could experience retroactive changes in our interconnect revenue and/or costs. The ultimate impact of any such changes in termination rates on our Segment Adjusted EBITDA would be dependent on the call or text messaging patterns that are subject to the changed termination rates.

We are subject to inflationary pressures with respect to certain costs and foreign currency exchange risk with respect to costs and expenses that are denominated in currencies other than the respective functional currencies of our combined reportable segments (**non-functional currency expenses**). Any cost increases that we are not able to pass on to our subscribers through rate increases would result in increased pressure on our operating margins. For additional information regarding our foreign currency exchange risks, see *Liquidity and Capital Resources* — *Foreign Currency Risk* below.

Combined Segment Adjusted EBITDA is a non-GAAP measure, which we believe 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 readily view operating trends from a combined view. Readers should view combined Segment Adjusted EBITDA as a supplement to, and not a substitute for, GAAP measures of performance included in our combined statements of operations.

The following table provides a reconciliation of loss from continuing operations to Segment Adjusted EBITDA:

| | Year ended December 31, | | | | | | |
|---|-------------------------|-------------|-----------|--|--|--|--|
| | 2021 | 2020 | 2019 | | | | |
| | | in millions | | | | | |
| Loss from continuing operations | € (11.8) | € (242.8) | € (164.8) | | | | |
| Income tax expense (benefit) | (44.5) | (29.5) | 28.5 | | | | |
| Other income, net | (30.7) | (19.9) | (19.7) | | | | |
| Losses on debt extinguishment, net | 75.1 | 40.5 | 13.8 | | | | |
| Foreign currency transaction losses (gains), net | (26.6) | (140.6) | 74.7 | | | | |
| Realized and unrealized losses (gains) on derivative instruments, net | (180.4) | 264.1 | (27.5) | | | | |
| Interest expense | 253.7 | 168.9 | 268.5 | | | | |
| Operating income | 34.8 | 40.7 | 173.5 | | | | |
| Impairment, restructuring and other operating items, net | (56.1) | 44.6 | 11.7 | | | | |
| Depreciation and amortization | 880.5 | 352.9 | 248.8 | | | | |
| Related-party fees and allocations, net | 160.1 | 163.3 | 122.0 | | | | |
| Share-based compensation expense | 20.9 | 19.7 | 20.4 | | | | |
| Segment Adjusted EBITDA | € 1 040 2 | € 621.2 | € 576.4 | | | | |

Revenue of our Reportable Segments

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

Variances in the subscription revenue that we receive from our customers are a function of (i) changes in the number of our fixed-line customers or mobile subscribers outstanding during the period and (ii) changes in ARPU. Changes in ARPU can be attributable to (a) changes in prices, (b) changes in bundling or promotional discounts, (c) changes in the tier of services selected, (d) variances in subscriber usage patterns and (e) the overall mix of fixed and mobile products during the period.

Revenue — 2021 compared to 2020

| | Y | ear ended l | Dece | mber 31, | Increase (| (decrease) | Organic decrease | | | | | | |
|-------------------|---|---------------------------------|------|----------|------------|------------|---------------------|-------|--|--|--|--|--|
| | | 2021 20 | | 2020 | | € | % | % | | | | | |
| | | in millions, except percentages | | | | | | | | | | | |
| Switzerland | € | 2,808.2 | € | 1,365.2 | € | 1,443.0 | 105.7 | (1.1) | | | | | |
| Central and Other | | 43.9 | | 44.4 | | (0.5) | (1.1) | (1.1) | | | | | |
| Total | € | 2,852.1 | € | 1,409.6 | € | 1,442.5 | 102.3 | (1.1) | | | | | |

Switzerland. The details of the increase in Switzerland's revenue during 2021, as compared to 2020, are set forth below:

| | Subscription revenue | Non- subscription revenue | Total |
|--|----------------------|---------------------------------|-----------|
| | | in millions | |
| Decrease in residential fixed subscription revenue due to change in: | | | |
| Average number of customers | € (22.3) | € — | € (22.3) |
| ARPU | (13.3) | _ | (13.3) |
| Decrease in residential fixed non-subscription revenue | | (2.3) | (2.3) |
| Total decrease in residential fixed revenue | (35.6) | (2.3) | (37.9) |
| Increase (decrease) in residential mobile revenue (a) | 39.7 | (62.9) | (23.2) |
| Increase (decrease) in B2B revenue (b) | (0.6) | 39.0 | 38.4 |
| Decrease in other revenue | | (8.1) | (8.1) |
| Total organic increase (decrease) | 3.5 | (34.3) | (30.8) |
| Impact of acquisitions | 1,011.0 | 486.2 | 1,497.2 |
| Impact of FX | (14.7) | (8.7) | (23.4) |
| Total | € 999.8 | € 443.2 | € 1,443.0 |

⁽a) The increase in residential mobile subscription revenue is largely due to an increase in the average number of mobile subscribers. The decrease in residential mobile non-subscription revenue is primarily attributable to a decrease in revenue from mobile handset sales.

Revenue — 2020 compared to 2019

For discussion and analysis of the revenue of our combined reportable segments during 2020, as compared to 2019, see *Management's Discussion and Analysis of Financial Condition and Results of Operations* included in Part II of our 2020 annual report.

⁽b) The increase in B2B non-subscription revenue is primarily due to the net effect of (i) higher revenue from wholesale services and (ii) lower revenue from telephony services.

Programming and Other Direct Costs of Services of our Reportable Segments

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

| | Ye | ar ended l | Dece | mber 31, | | Incr | ease | Organic increase (decrease) | | |
|-------------------|----|------------|---------|----------|---|-------|-------|-----------------------------|---|---|
| | | 2021 2020 | | 2020 | | 2020 | | ϵ | % | % |
| | | | entages | | | | | | | |
| Switzerland | € | 898.4 | € | 360.0 | € | 538.4 | 149.6 | (4.5) | | |
| Central and Other | | 8.2 | | 7.2 | | 1.0 | 13.9 | 13.9 | | |
| Total | € | 906.6 | € | 367.2 | € | 539.4 | 146.9 | (4.4) | | |

Our programming and other direct costs of services increased €539.4 million or 146.9% during 2021, as compared to 2020. This increase includes an increase of €588.1 million attributable to the impact of the Sunrise Acquisition. On an organic basis, our programming and other direct costs of services decreased €41.9 million or 4.4%. This decrease includes the following factors:

- A decrease in mobile handset and other device costs of €66.0 million or 121.3%, primarily due to lower sales volumes in Switzerland; and
- An increase in interconnect and access costs of €21.6 million or 13.5%, primarily due to changes in Switzerland, including the net effect of (i) higher leased tower costs, (ii) lower MVNO costs and (iii) lower interconnect and mobile roaming costs.

Other Operating Expenses of our Reportable Segments

Other operating expenses include network operations, customer operations, customer care and other costs related to our operations.

| | Ye | ear ended | Dece | ember 31, |] | Increase (| decrease) | Organic decrease | | | | |
|-------------------|----|-----------|------|-------------|-------|------------|-----------|------------------|--|------------|---|---|
| | | 2021 | | 2021 | | 2021 | | 2020 | | ϵ | % | % |
| | | | | in millions | s, ex | cept perce | entages | | | | | |
| Switzerland | € | 342.0 | € | 183.4 | € | 158.6 | 86.5 | (2.2) | | | | |
| Central and Other | | 9.2 | | 9.8 | | (0.6) | (6.1) | (6.1) | | | | |
| Total | € | 351.2 | € | 193.2 | € | 158.0 | 81.8 | (2.4) | | | | |

Our other operating expenses increased $\[\in \]$ 158.0 million or 81.8% during 2021, as compared to 2020. This increase includes an increase of $\[\in \]$ 170.5 million attributable to the impact of the Sunrise Acquisition. On an organic basis, our other operating expenses decreased $\[\in \]$ 8.7 million or 2.4%.

SG&A Expenses of our Reportable Segments

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

| Ye | ear ended l | Dece | ember 31, |] | Increase (| decrease) | Organic increase (decrease) |
|----|-------------|---|--|--|---|--|--|
| | 2021 | | 2020 | | ϵ | % | % |
| | | | in million | s, ex | cept perc | entages | |
| € | 545.5 | € | 218.6 | € | 326.9 | 149.5 | 5.6 |
| | 8.6 | | 9.4 | | (0.8) | (8.5) | (8.5) |
| | 554.1 | | 228.0 | | 326.1 | 143.0 | 5.4 |
| | 20.9 | | 19.7 | | 1.2 | N.M. | |
| € | 575.0 | € | 247.7 | € | 327.3 | 132.1 | |
| | _ | 2021 € 545.5 8.6 1 554.1 20.9 | 2021 € 545.5 € 8.6 8.6 554.1 20.9 | in million € 545.5 € 218.6 8.6 9.4 554.1 228.0 20.9 19.7 | 2021 2020 in millions, ex € 545.5 € 218.6 € 8.6 9.4 1 554.1 228.0 20.9 19.7 | 2021 2020 € in millions, except percentage € 545.5 € 218.6 € 326.9 8.6 9.4 (0.8) 554.1 228.0 326.1 20.9 19.7 1.2 | 2021 2020 € % in millions, except percentages € 545.5 € 218.6 € 326.9 149.5 8.6 9.4 (0.8) (8.5) 554.1 228.0 326.1 143.0 20.9 19.7 1.2 N.M. |

N.M. — Not Meaningful.

Our SG&A expenses (exclusive of share-based compensation expense) increased €326.1 million or 143.0% during 2021, as compared to 2020. This increase includes an increase of €301.9 million attributable to the impact of the Sunrise Acquisition. On an organic basis, our SG&A expenses increased €28.5 million or 5.4%. This increase includes the following factors:

- An increase in business service costs of €10.3 million or 48.4%, primarily due to higher consulting costs in Switzerland;
- An increase in core network and information technology-related costs of €8.7 million or 48.5%, primarily due to higher information technology-related expenses in Switzerland; and
- An increase in external sales and marketing costs of €8.2 million or 17.0%, primarily due to higher costs in Switzerland associated with (i) advertising campaigns and (ii) third-party sales commissions.

Segment Adjusted EBITDA of our Reportable Segments

Segment Adjusted EBITDA is the primary measure used by our chief operating decision maker to evaluate segment operating performance. As presented below, combined Segment Adjusted EBITDA is a non-GAAP measure, which readers should view as a supplement to, and not a substitute for, GAAP measures of performance included in our combined statements of operations. The following tables set forth the Segment Adjusted EBITDA of our reportable segments.

Segment Adjusted EBITDA — 2021 compared to 2020

| | Y | ear ended l | Dece | mber 31, | (decrease) | Organic decrease | | |
|-------------------|---|-------------|------|------------|------------|---------------------|---------|-------|
| | | 2021 2020 | | | | ϵ | % | % |
| | | | | in million | s, ex | cept perce | entages | |
| Switzerland | € | 1,022.3 | € | 603.2 | € | 419.1 | 69.5 | (0.9) |
| Central and Other | | 17.9 | | 18.0 | | (0.1) | (0.6) | (0.6) |
| Total | € | 1,040.2 | € | 621.2 | € | 419.0 | 67.5 | (0.9) |

Segment Adjusted EBITDA Margin — 2021 and 2020

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

| | Year ended De | cember 31, |
|-------------------|---------------|------------|
| | 2021 % 36.4 | 2020 |
| | 0/0 | |
| Switzerland | 36.4 | 44.1 |
| Central and Other | 40.8 | 40.5 |

In addition to organic changes in the revenue, operating and SG&A expenses of our reportable segments, the Segment Adjusted EBITDA margins presented above include the impact of acquisitions, as applicable. In this regard, the Sunrise Acquisition had a significant adverse impact on the Segment Adjusted EBITDA margin in Switzerland, as the acquired Sunrise mobile business generates a relatively lower Segment Adjusted EBITDA margin than our legacy operations in Switzerland. For discussion of the factors contributing to the changes in the Segment Adjusted EBITDA margins of our reportable segments, see the above analyses of the revenue and expenses of our reportable segments.

Segment Adjusted EBITDA — 2020 compared to 2019

For details of our Segment Adjusted EBITDA and Segment Adjusted EBITDA margins during 2020, as compared to 2019, see *Management's Discussion and Analysis of Financial Condition and Results of Operations* included in Part II of our 2020 annual report.

Discussion and Analysis of our Combined Operating Results

General

For more detailed explanations of the changes in our revenue, see *Discussion and Analysis of our Reportable Segments* above.

Year ended December 31.

Organic increase

(decrease)

Increase (decrease)

2021 compared to 2020

Revenue

Our revenue by major category is set forth below:

| | | 2021 | | 2020 | | € | % | % |
|----------------------------------|---|---------|---|-----------|-------|--------------|--------|--------|
| | | | | in millio | ns, e | except perce | ntages | |
| Residential revenue: | | | | | | | | |
| Residential fixed revenue (a): | | | | | | | | |
| Subscription revenue (b): | | | | | | | | |
| Broadband internet | € | 516.2 | € | 329.5 | € | 186.7 | 56.7 | 1.5 |
| Video | | 466.1 | | 425.1 | | 41.0 | 9.6 | (5.2) |
| Fixed-line telephony | | 156.0 | | 96.2 | | 59.8 | 62.2 | (9.8) |
| Total subscription revenue | | 1,138.3 | | 850.8 | | 287.5 | 33.8 | (3.0) |
| Non-subscription revenue | | 65.9 | | 89.1 | | (23.2) | (26.0) | (2.8) |
| Total residential fixed revenue | | 1,204.2 | | 939.9 | | 264.3 | 28.1 | (3.0) |
| Residential mobile revenue (c): | | | | | | | | |
| Subscription revenue (b) | | 811.6 | | 178.3 | | 633.3 | 355.2 | 5.1 |
| Non-subscription revenue | | 299.8 | | 70.1 | | 229.7 | 327.7 | (17.2) |
| Total residential mobile revenue | | 1,111.4 | | 248.4 | | 863.0 | 347.4 | (2.0) |
| Total residential revenue | | 2,315.6 | | 1,188.3 | | 1,127.3 | 94.9 | (2.5) |
| B2B revenue (d): | | | | | | | | |
| Subscription revenue | | 115.6 | | 36.6 | | 79.0 | 215.8 | (0.5) |
| Non-subscription revenue | | 399.9 | | 177.4 | | 222.5 | 125.4 | 10.5 |
| Total B2B revenue | | 515.5 | | 214.0 | | 301.5 | 140.9 | 7.8 |
| Other revenue | | 21.0 | | 7.3 | | 13.7 | 187.7 | (28.8) |
| Total | € | 2,852.1 | € | 1,409.6 | € | 1,442.5 | 102.3 | (1.1) |

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

⁽b) Residential subscription revenue from subscribers who purchase bundled services at a discounted rate is generally allocated proportionally to each service based on the standalone price for each individual service. As a result, changes in the standalone pricing of our fixed and mobile products or the composition of bundles can contribute to changes in our product revenue categories from period to period.

⁽c) Residential mobile subscription revenue includes amounts received from subscribers for ongoing services. Residential mobile non-subscription revenue includes, among other items, interconnect revenue and revenue from sales of mobile handsets and other devices. Residential mobile interconnect revenue was €63.3 million and €9.0 million during 2021 and 2020, respectively.

(d) B2B subscription revenue represents revenue from (i) services provided to SOHO subscribers and (ii) mobile services provided to medium and large enterprises. SOHO subscribers pay a premium price to receive expanded service levels along with broadband internet, video, fixed-line telephony or mobile services that are the same or similar to the mass marketed products offered to our residential subscribers. A portion of the increase in our B2B subscription revenue is attributable to the conversion of certain residential subscribers to SOHO subscribers. B2B non-subscription revenue includes revenue from business broadband internet, video, fixed-line telephony and data services offered to medium and large enterprises and, on a wholesale basis, to other operators.

Total revenue. Our combined revenue increased €1,442.5 million or 102.3% during 2021, as compared to 2020. This increase includes an increase of €1,479.2 million attributable to the impact of the Sunrise Acquisition. On an organic basis, our combined revenue decreased €31.3 million or 1.1%.

Residential revenue. The details of the increase in our combined residential revenue during 2021, as compared to 2020, are as follows (in millions):

| Decrease in residential fixed subscription revenue due to change in: | | |
|--|---|---------|
| Average number of customers | € | (21.2) |
| ARPU | | (14.4) |
| Decrease in residential fixed non-subscription revenue | | (1.9) |
| Total decrease in residential fixed revenue | | (37.5) |
| Increase in residential mobile subscription revenue | | 39.7 |
| Decrease in residential mobile non-subscription revenue | | (62.9) |
| Total organic decrease in residential revenue | | (60.7) |
| Impact of acquisitions | | 1,205.0 |
| Impact of FX | | (17.0) |
| Total increase in residential revenue | € | 1,127.3 |

On an organic basis, our combined residential fixed subscription and non-subscription revenue decreased \in 35.6 million or 3.0% and \in 1.9 million or 2.8%, respectively, during 2021, as compared to 2020.

On an organic basis, our combined residential mobile subscription and non-subscription revenue increased (decreased) €39.7 million or 5.1% and (€62.9 million) or (17.2%), respectively, during 2021, as compared to 2020.

B2B revenue. On an organic basis, our combined B2B subscription and non-subscription revenue increased (decreased) (€0.6 million) or (0.5%) and €38.5 million or 10.5%, respectively, during 2021, as compared to 2020.

For additional information concerning the changes in our residential and B2B revenue, see *Discussion and Analysis of our Reportable Segments* — *Revenue* — 2021 compared to 2020 above. For information regarding the competitive environment in certain of our markets, see *Overview* above.

Programming and other direct costs of services

Our programming and other direct costs of services increased €539.4 million or 146.9% during 2021, as compared to 2020. On an organic basis, our programming and other direct costs of services decreased €41.9 million or 4.4%. For additional information regarding the changes in our programming and other direct costs of services, see *Discussion and Analysis of our Reportable Segments*— *Programming and Other Direct Costs of Services of our Reportable Segments* above.

Other operating expenses

Our other operating expenses increased €158.0 million or 81.8% during 2021, as compared to 2020. On an organic basis, our other operating expenses decreased €8.7 million or 2.4%. For additional information regarding the changes in our other operating expenses, see *Discussion and Analysis of our Reportable Segments* — *Other Operating Expenses of our Reportable Segments* above.

SG&A expenses

Our SG&A expenses increased €327.3 million or 132.1% during 2021, as compared to 2020. Our SG&A expenses include share-based compensation expense, which is described below. For additional information, see the discussion in the following paragraph. Excluding share-based compensation expense, on an organic basis our SG&A expenses increased €28.5 million or 5.4%. For additional information regarding the changes in our SG&A expenses, see *Discussion and Analysis of our Reportable Segments — SG&A Expenses of our Reportable Segments* above.

Share-based compensation expense

The amounts allocated by Liberty Global to our company represent the share-based compensation associated with the Liberty Global share-based incentive awards held by certain employees of our combined entities. A summary of the aggregate share-based compensation expense that is included in our SG&A expenses is set forth below:

| | Y | ıber 31, | | |
|------------------------------------|---|----------|--------|------|
| | | 2021 | | 2020 |
| | | in mi | llions | |
| Performance-based incentive awards | € | 2.5 | € | 11.4 |
| Other share-based incentive awards | | 18.4 | | 8.3 |
| Total | € | 20.9 | € | 19.7 |

Related-party fees and allocations, net

We recorded related-party fees and allocations, net, related to our estimated share of the applicable costs incurred by Liberty Global subsidiaries of €160.1 million during 2021, as compared to €163.3 million during 2020. These charges generally relate to management, finance, legal and other corporate and administrative services provided to or by our combined entities. For additional information, see note 13 and 17 to our combined financial statements.

Depreciation and amortization expense

Our depreciation and amortization expense was €880.5 million and €352.9 million during 2021 and 2020, respectively. Excluding the effects of FX, depreciation and amortization expense increased €533.0 million or 151.1%, primarily due to the impact of the Sunrise Acquisition. In addition, this increase includes the net effect of (i) a decrease associated with certain assets becoming fully depreciated and (ii) an increase associated with property and equipment additions related to the installation of customer premises equipment, the expansion and upgrade of our networks and other capital initiatives.

Impairment, restructuring and other operating items, net

We recognized impairment, restructuring and other operating items, net, of (€56.1 million) during 2021, as compared to €44.6 million during 2020. The 2021 amount is primarily related to (i) a €96.1 million gain related to the settlement of certain litigation in Switzerland and (ii) employee severance and termination costs related to certain reorganization activities in Switzerland. The 2020 amount is primarily related to employee severance and termination costs related to certain reorganization activities in Switzerland.

If, among other factors, (i) our enterprise value or Liberty Global's equity value were to decline or (ii) the adverse impacts of economic, competitive, regulatory or other factors were to cause our results of operations or cash flows to be worse than anticipated, we could conclude in future periods that impairment charges are required in order to reduce the carrying values of our goodwill and, to a lesser extent, other long-lived assets. Any such impairment charges could be significant. For additional information, see *Critical Accounting Policies, Judgments and Estimates — Impairment of Property and Equipment and Intangible Assets* below.

Interest expense

Our interest expense increased €84.8 million during 2021, as compared to 2020. This increase includes an increase of €78.8 million related to third-party interest expense, primarily attributable to a higher average outstanding third-party debt balance. For additional information regarding our outstanding indebtedness, see note 9 to our combined financial statements.

It is possible that the interest rates on (i) any new borrowings could be higher than the current interest rates on our existing indebtedness and (ii) our variable-rate indebtedness could increase in future periods. As further discussed in note 6 to our combined financial statements, we use derivative instruments to manage our interest rate risks.

In July 2017, the U.K. Financial Conduct Authority (the authority that regulates LIBOR) announced that it intends to stop compelling banks to submit rates for the calculation of LIBOR after 2021. Additionally, the European Money Markets Institute (the authority that administers EURIBOR) announced that measures would need to be undertaken by the end of 2021 to reform EURIBOR to ensure compliance with the E.U. Benchmarks Regulation. In November 2020, ICE Benchmark Administration (the entity that administers LIBOR) announced its intention to continue publishing USD LIBOR rates until June 30, 2023, with the exception of the one-week and two-month rates which, along with all CHF and GBP LIBOR rates, it ceased to publish after December 31, 2021. While this extension allows additional runway on existing contracts using USD LIBOR rates, companies are still encouraged to transition away from using USD LIBOR as soon as practicable and should not enter into new contracts that use USD LIBOR after 2021. The methodology for EURIBOR has been reformed and EURIBOR has been granted regulatory approval to continue to be used. Currently, there is no consensus amongst loan borrowers and investors for what rate(s) should replace USD LIBOR.

In October 2020, the International Swaps and Derivatives Association (the ISDA) launched the Fallback Supplement, which, as of January 25, 2021, amended the standard definitions for interest rate derivatives to incorporate fallbacks for derivatives linked to certain key interbank offered rates (IBORs). The ISDA also launched the Fallback Protocol, a protocol that enables market participants to incorporate these revisions into their legacy non-cleared derivatives with other counterparties that choose to adhere to the protocol. The fallbacks for a particular currency apply following a permanent cessation of the IBOR in that currency, or in the case of a LIBOR setting, that LIBOR setting becoming permanently unrepresentative, and are adjusted versions of the risk-free rates identified in each currency. Our credit agreements contain provisions that contemplate alternative calculations of the base rate applicable to our LIBOR-indexed and EURIBOR-indexed debt to the extent LIBOR or EURIBOR (as applicable) are not available, which alternative calculations we do not anticipate will be materially different from what would have been calculated under LIBOR or EURIBOR (as applicable). Additionally, no mandatory prepayment or redemption provisions would be triggered under our credit agreements in the event that either the LIBOR rate or the EURIBOR rate is not available. It is possible, however, that any new reference rate that applies to our LIBOR-indexed or EURIBORindexed debt could be different from any new reference rate that applies to our LIBOR-indexed or EURIBOR-indexed derivative instruments. For discontinued currencies and tenors, we expect to continue taking steps to mitigate the changes in these benchmark rates, including by amending existing credit agreements and adhering to the Fallback Protocol, where appropriate. We plan to continue to manage this difference and any resulting increased variable-rate exposure through modifications to our debt and/or derivative instruments, however future market conditions may not allow immediate implementation of desired modifications and our company may incur significant associated costs.

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

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

| | Y | ear ended l | December 31, | | |
|---|---|-------------|--------------|---------|--|
| | | 2021 | | 2020 | |
| | | in mi | llion | s | |
| Cross-currency and interest rate derivative contracts (a) | € | 173.0 | € | (235.9) | |
| Foreign currency forward and option contracts | | 7.4 | | (28.2) | |
| Total | € | 180.4 | € | (264.1) | |

(a) The gain during 2021 is primarily attributable to net gains associated with changes in (i) certain market interest rates and (ii) the relative value of certain currencies. In addition, the gain during 2021 includes a net gain of €7.4 million resulting from changes in our credit risk valuation adjustments. The loss during 2020 is primarily attributable the net effect of (a) a net loss associated with changes in the relative value of certain currencies and (b) a net gain associated with changes in certain market interest rates. In addition, the loss during 2020 includes a net gain of €65.0 million resulting from changes in our credit risk valuation adjustments.

For additional information regarding our derivative instruments, see notes 6 and 7 to our combined financial statements.

Foreign currency transaction gains (losses), net

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

| | Ye | ar ended D | D ecember | 31, |
|---|----|------------|------------------|-------|
| | 2 | 2021 | 2020 |) |
| | | in mil | lions | |
| Intercompany payables and receivables denominated in a currency other than the entity's functional currency (a) | € | 247.2 | € | 42.4 |
| U.S. dollar denominated debt issued by euro functional currency entities | | (218.7) | | 98.7 |
| Cash and restricted cash denominated in a currency other than the entity's functional currency | | (0.2) | | (1.7) |
| Other | | (1.7) | | 1.2 |
| Total | € | 26.6 | € 1 | 40.6 |

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

For information regarding how we manage our exposure to foreign currency risk, see *Liquidity and Capital Resources* — *Foreign Currency Risk* below.

Losses on debt extinguishment, net

We recognized net losses on debt extinguishment of \in 75.1 million and \in 40.5 million during 2021 and 2020, respectively. The loss during 2021 is attributable to (i) the write-off of \in 64.3 million of unamortized deferred financing costs and discounts and (ii) the payment of \in 10.8 million of redemption premiums. The loss during 2020 is primarily attributable to the payment of \in 39.1 million of redemption premiums.

For additional information concerning our losses on debt extinguishment, net, see note 9 to our combined financial statements.

Income tax benefit (expense)

We recognized income tax benefit of €44.5 million and €29.5 million during 2021 and 2020, respectively.

The income tax benefit during 2021 differs from the expected income tax benefit of €14.1 million (based on the Dutch 25.0% income tax rate) primarily due to the net positive impact of a decrease in valuation allowances, partially offset by the net negative impact of statutory tax rates in certain jurisdictions in which we operate that differ from the Dutch income tax rate.

The income tax benefit during 2020 differs from the expected income tax benefit of €68.1 million (based on the Dutch 25.0% income tax rate) primarily due to the net negative impact of an increase in valuation allowances, partially offset by certain permanent differences between the financial and tax accounting treatment of interest and other items.

For additional information concerning our income taxes, see note 11 to our combined financial statements.

Loss from continuing operations

During 2021 and 2020, we reported losses from continuing operations of \in 11.8 million and \in 242.8 million, respectively, consisting of (i) operating income of \in 34.8 million and \in 40.7 million, respectively, (ii) net non-operating expense of \in 91.1 million and \in 313.0 million, respectively, and (iii) income tax benefit of \in 44.5 million and \in 29.5 million, respectively.

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

Subject to the limitations included in our various debt instruments, we expect that Liberty Global will cause our company to maintain our debt at current levels relative to our Covenant EBITDA. As a result, we expect that we will continue to report significant levels of interest expense for the foreseeable future. For information concerning our expectations with respect to trends that may affect certain aspects of our operating results in future periods, see the discussion under *Overview* above. For information concerning the reasons for changes in specific line items in our combined statements of operations, see the discussion under *Discussion and Analysis of our Reportable Segments* and *Discussion and Analysis of our Combined Operating Results* above.

Earnings (loss) from discontinued operations

We reported earnings (loss) from discontinued operations, net of taxes, of \in 23.0 million and (\in 16.7 million) during 2021 and 2020, respectively, related to the results of UPC Poland. For additional information, see note 5 to our combined financial statements.

2020 compared to 2019

For information regarding the discussion and analysis of our combined operating results during 2020, as compared to 2019, see *Management's Discussion and Analysis of Financial Condition and Results of Operations* included in Part II of our 2020 annual report.

Liquidity and Capital Resources

Sources and Uses of Cash

The UPC Holding Group's primary assets are its investments in its combined entities, and the majority of our operating entities are owned by UPC Broadband Holding B.V. (UPC Broadband Holding). Although our combined operating entities generate cash from operating activities, the terms of the instruments governing the indebtedness of UPC Broadband Holding may restrict our ability to access the liquidity of these entities. These entities accounted for substantially all of our €16.9 million of combined cash and cash equivalents at December 31, 2021. In addition, our ability to access the liquidity of these and other combined entities may be limited by tax and legal considerations, the presence of noncontrolling interests and other factors.

Corporate Liquidity of the UPC Holding Group

As the UPC Holding Group typically does not hold significant amounts of cash and cash equivalents at the corporate level, the UPC Holding Group's primary source of corporate liquidity is proceeds received from UPC Broadband Holding (and indirectly from UPC Broadband Holding's combined entities) in the form of loans or distributions. As noted above, various factors may limit the ability of the UPC Holding Group's combined entities to loan or distribute cash. From time to time, the UPC Holding Group may also supplement its sources of corporate liquidity with net proceeds received in connection with the issuance of debt instruments and/or loans or contributions from LGE Financing (and ultimately Liberty Global and other Liberty Global subsidiaries). No assurance can be given that any external funding would be available on favorable terms, or at all.

The UPC Holding Group's corporate liquidity requirements include (i) corporate general and administrative expenses and (ii) interest payments on the UPC Holding Senior Notes. From time to time, UPC Holding may also require cash in connection with (a) the repayment of third-party and related-party debt (including the repurchase or exchange of outstanding debt securities in the open market or privately-negotiated transactions and net repayments to LGE Financing pursuant to the Shareholder Loan, as described in note 13 to our combined financial statements), (b) the funding of loans or distributions to LGE Financing (and ultimately Liberty Global and other Liberty Global subsidiaries), (c) the satisfaction of contingent liabilities, (d) acquisitions, (e) other investment opportunities or (f) income tax payments.

Liquidity of Combined Operating Entities

In addition to cash and cash equivalents, the primary source of liquidity of our combined operating entities is cash provided by operations and, in the case of UPC Broadband Holding, borrowing availability under the UPC Holding Bank Facility. For the details of the borrowing availability under the UPC Holding Bank Facility at December 31, 2021, see note 9 to our combined financial statements. Our combined operating entities' liquidity is generally used to fund (i) property and equipment additions, (ii) debt service requirements and (iii) payments required by the UPC Holding Group's derivative instruments, as well as to settle certain obligations that are not included on our December 31, 2021 combined balance sheet. In this regard, we have significant commitments related to (a) programming studio output and sports rights contracts, (b) certain operating costs associated with our networks and (c) purchase obligations associated with customer premises equipment and certain service-related commitments. These obligations are expected to represent a significant liquidity requirement of our combined operating entities, the majority of which is due over the next 12 to 24 months. For additional information regarding our commitments, see note 16 to our combined financial statements.

From time to time, our combined operating entities may also require liquidity in connection with (i) acquisitions and other investment opportunities, (ii) loans to UPC Holding or other Liberty Global subsidiaries, (iii) capital distributions to UPC Holding or (iv) the satisfaction of contingent liabilities. No assurance can be given that any external funding would be available to our combined operating entities on favorable terms, or at all.

For additional information regarding our combined cash flows, see the discussion under *Combined Statements of Cash Flows* below.

Capitalization

At December 31, 2021, the outstanding principal amount of our combined third-party debt, together with the present value of our finance lease obligations, aggregated ϵ 6,611.6 million, including ϵ 273.3 million that is classified as current on our combined balance sheet and ϵ 6,330.3 million that is not due until 2027 or thereafter. For additional information regarding our current debt maturities, see note 9 to our combined financial statements.

Our ability to service or refinance our debt and to maintain compliance with the leverage covenants in the credit agreements and indentures of the UPC Holding Group is dependent primarily on our ability to maintain or increase the Covenant EBITDA of our operating entities and to achieve adequate returns on our property and equipment additions and acquisitions. In addition, our ability to obtain additional debt financing is limited by the incurrence-based leverage covenants contained in the UPC Holding Group's debt instruments. For example, if our Covenant EBITDA were to decline, our ability to obtain additional debt could be limited.

At December 31, 2021, the UPC Holding Group was in compliance with its respective debt covenants. In addition, we do not anticipate any instances of non-compliance with respect to any of our debt covenants that would have a material adverse impact on our liquidity during the next 12 months.

Notwithstanding our negative working capital position at December 31, 2021, we believe we have sufficient resources to repay or refinance the current portion of our debt and finance lease obligations and to fund our foreseeable liquidity requirements during the next 12 months. However, as our maturing debt grows in later years, we anticipate we will seek to refinance or otherwise extend our debt maturities. No assurance can be given that we will be able to complete these refinancing transactions or otherwise extend our debt maturities. In this regard, it is not possible to predict how political and economic conditions (including with respect to the ongoing invasion of Ukraine by Russia), sovereign debt concerns or any adverse regulatory developments could impact the credit markets we access and, accordingly, our future liquidity and financial position. Our ability to access debt financing on favorable terms, or at all, could be adversely impacted by (i) the financial failure of any of our counterparties, which could (a) reduce amounts available under committed credit facilities and (b) adversely impact our ability to access cash deposited with any failed financial institution and (ii) tightening of the credit markets. In addition, sustained or increased competition, particularly in combination with adverse economic or regulatory developments, could have an unfavorable impact on our cash flows and liquidity.

With the exception of the UPC Holding Senior Notes, all of our combined third-party debt and finance lease obligations had been borrowed or incurred by our combined entities at December 31, 2021.

For additional information regarding our debt and finance lease obligations, see notes 9 and 10, respectively, to our combined financial statements.

Combined Statements of Cash Flows

General. Our cash flows are subject to significant variations due to FX. See related discussion under Foreign Currency Risk below.

Combined Statements of Cash Flows — 2021 compared to 2020

Summary. The 2021 and 2020 combined statements of cash flows of our continuing operations are summarized as follows:

| | Year ended December 31, | | | | | |
|--|-------------------------|---------|----|------------|---|-----------|
| | 2021 2020 | | | | | Change |
| | | | iı | n millions | | |
| Net cash provided by operating activities | € | 836.7 | € | 425.4 | € | 411.3 |
| Net cash used by investing activities | | (281.7) | | (4,681.2) | | 4,399.5 |
| Net cash provided (used) by financing activities | | (557.2) | | 4,265.4 | | (4,822.6) |
| Effect of exchange rate changes on cash and cash equivalents and restricted cash | | 1.2 | | 1.0 | | 0.2 |
| Net increase (decrease) in cash and cash equivalents and restricted cash | € | (1.0) | € | 10.6 | € | (11.6) |

Operating Activities. The increase in net cash provided by our operating activities is primarily attributable to the net effect of (i) an increase in cash provided by our Segment Adjusted EBITDA and related working capital items, (ii) a decrease in cash provided due to higher payments for third-party interest and (iii) an increase in cash provided due to lower payments for taxes. Combined Segment Adjusted EBITDA is a non-GAAP measure which readers should view as a supplement to, and not a substitute for, GAAP measures of performance included in our combined statements of operations.

Investing Activities. The decrease in net cash used by our investing activities is primarily attributable to the net effect of (i) a decrease in cash used of \in 4,412.2 million related to the Sunrise Acquisition and (ii) an increase in cash used of \in 144.0 million due to higher capital expenditures.

The capital expenditures we report in our combined statements of cash flows do not include (i) amounts that are financed under capital-related vendor financing or finance lease arrangements or (ii) purchased assets transferred to our company by another entity under the common control of Liberty Global in exchange for non-cash increases to the Shareholder Loan or non-cash decreases to the LGEF Receivable or non-cash contributions from our parent entities (non-cash related-party capital additions). Instead, these amounts are reflected as non-cash additions to our property and equipment when the underlying assets are delivered and, in the case of capital-related vendor financing and finance lease arrangements and non-cash related-party capital additions that are settled through increases to the Shareholder Loan, as repayments of debt when the principal is repaid. In this discussion, we refer to (a) our capital expenditures as reported in our combined statements of cash flows, which exclude non-cash related-party capital additions and amounts financed under capital-related vendor financing or finance lease arrangements, and (b) our total property and equipment additions, which include our capital expenditures on an accrual basis, non-cash related-party capital additions and amounts financed under capital-related vendor financing or finance lease arrangements. For additional information, see notes 8, 9 and 10 to our combined financial statements. For further details regarding our property and equipment additions, see note 17 to our combined financial statements.

A reconciliation of our combined property and equipment additions to our combined capital expenditures, as reported in our combined statements of cash flows, is set forth below:

| | Y | Year ended December 31, | | | | |
|--|------|-------------------------|------|---------|--|--|
| | 2021 | | 2020 | | | |
| | | in millions | | | | |
| Property and equipment additions (a) | € | 527.6 | € | 275.1 | | |
| Assets acquired under capital-related vendor financing arrangements | | (207.8) | | (281.9) | | |
| Assets acquired under finance leases | | (1.7) | | (1.2) | | |
| Changes in current liabilities related to capital expenditures (including related-party amounts) | | (22.8) | | 159.3 | | |
| Total capital expenditures, net | € | 295.3 | € | 151.3 | | |

(a) The increase in our property and equipment additions during 2021, as compared to 2020, is primarily due to the net effect of (i) an increase related to the Sunrise Acquisition and (ii) a decrease in local currency expenditures of our combined entities, primarily due to decreases in (a) baseline expenditures, including network improvements and expenditures for property and facilities and information technology systems, (b) expenditures for the purchase and installation of customer premises equipment and (c) expenditures for new build and upgrade projects. During 2021 and 2020, our property and equipment additions represented 18.5% and 19.5% of revenue, respectively.

Financing Activities. The change in net cash provided (used) by our financing activities is primarily due to decreases in cash of (i) \in 3,092.5 million due to a capital contribution received in 2020 related to the Sunrise Acquisition, (ii) \in 1,627.5 million due to higher net repayments of third-party debt and (iii) \in 348.1 million due to higher net repayments of related-party debt.

Combined Statements of Cash Flows — 2020 compared to 2019

For information regarding the combined statements of cash flows of our continuing operations for 2020, as compared to 2019, see *Management's Discussion and Analysis of Financial Condition and Results of Operations* included in Part II of our 2020 annual report.

Projected Cash Flows Associated with Derivative Instruments

The following table provides information regarding the projected cash flows associated with our derivative instruments. The euro equivalents presented below are based on interest rate projections and exchange rates as of December 31, 2021. These amounts are presented for illustrative purposes only and will likely differ from the actual cash payments or receipts required in future periods. For additional information regarding our derivative instruments, including our counterparty credit risk, see note 6 to our combined financial statements.

| | Payments (receipts) due during: | | | | | | | | | | | | | |
|---|---------------------------------|--------|------|------|---|--------|----|----------|---|--------|------------|---------|---|---------|
| | | 2022 | 2023 | | | 2024 | | 2025 | | 026 | Thereafter | | | Total |
| | | | | | | | in | millions | | | | | | |
| Projected derivative cash payments (receipts), net: | | | | | | | | | | | | | | |
| Interest-related (a) | € | (41.1) | € | 38.8 | € | (63.3) | € | (90.7) | € | (50.3) | € | (134.7) | € | (341.3) |
| Principal-related (b) | | _ | | 55.5 | | 3.9 | | 89.2 | | 19.5 | | 45.6 | | 213.7 |
| Other (c) | | 21.3 | | | | | | | | | | | | 21.3 |
| Total | € | (19.8) | € | 94.3 | € | (59.4) | € | (1.5) | € | (30.8) | € | (89.1) | € | (106.3) |

- (a) Includes (i) the cash flows of our interest rate cap, floor and swap contracts and (ii) the interest-related cash flows of our cross-currency and interest rate swap contracts.
- (b) Includes the principal-related cash flows of our cross-currency swap contracts.
- (c) Includes amounts related to our foreign currency forward contracts.

Foreign Currency Risk

We are exposed to foreign currency exchange rate risk with respect to our combined debt in situations where our debt is denominated in U.S. dollars. Although we generally match the denomination of our borrowings with our functional currency, market conditions or other factors may cause us to enter into borrowing arrangements that are not denominated in our functional currency (unmatched debt). In these cases, our policy is to provide for an economic hedge against foreign currency exchange rate movements by using derivative instruments to synthetically convert unmatched debt into the applicable underlying currency. At December 31, 2021, substantially all of our debt was either directly or synthetically matched to our functional currency. For additional information concerning the terms of our derivative instruments, see note 6 to our combined financial statements.

In addition to the exposure that results from the mismatch of our borrowings and our functional currency, we are exposed to foreign currency risk to the extent that we enter into transactions denominated in currencies other than our functional currency (non-functional currency risk), such as equipment purchases, programming contracts, notes payable and notes receivable (including intercompany amounts). Changes in exchange rates with respect to amounts recorded on our combined balance sheets related to these items will result in unrealized (based upon period-end exchange rates) or realized foreign currency transaction gains and losses upon settlement of the transactions. Moreover, to the extent that our revenue, costs and expenses are denominated in currencies other than our functional currency, we will experience fluctuations in our revenue, costs and expenses solely as a result of changes in foreign currency exchange rates. Generally, we will consider hedging non-functional currency risks when the risks arise from agreements with third parties that involve the future payment or receipt of cash or other monetary items to the extent that we can reasonably predict the timing and amount of such payments or receipts and the payments or receipts are not otherwise hedged. In this regard, we have entered into foreign currency forward and option contracts to hedge certain of these risks. For additional information concerning our foreign currency forward and option contracts, see note 6 to our combined financial statements.

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

| | | As of December 31, | | | |
|----------------|--------|--------------------|--------|--|--|
| | | 2021 | 2020 | | |
| Spot rates: | | | | | |
| Swiss franc | | 1.0377 | 1.0821 | | |
| Polish zloty | | 4.5870 | 4.5678 | | |
| | | | | | |
| | Year e | ended December 31, | | | |
| | 2021 | 2020 | 2019 | | |
| Average rates: | | | | | |
| Swiss franc | 1.0813 | 1.0703 | 1.1126 | | |
| Polish zloty | 4.5638 | 4.4431 | 4.2971 | | |

Critical Accounting Policies, Judgments and Estimates

In connection with the preparation of our combined financial statements, we make estimates and assumptions that affect the reported amounts of assets and liabilities, revenue and expenses and related disclosure of contingent assets and liabilities. Critical accounting policies are defined as those policies that are reflective of significant judgments, estimates and uncertainties, which would potentially result in materially different results under different assumptions and conditions. We believe the following accounting policies are critical in the preparation of our combined financial statements because of the judgment necessary to account for these matters and the significant estimates involved, which are susceptible to change:

- Impairment of property and equipment and intangible assets (including goodwill);
- Costs associated with construction and installation activities;
- Fair value measurements; and
- Income tax accounting.

For additional information concerning our significant accounting policies, see note 3 to our combined financial statements.

Impairment of Property and Equipment and Intangible Assets

Carrying Value. The aggregate carrying value of our property and equipment and intangible assets (including goodwill) that was held for use comprised 76% of our total assets at December 31, 2021.

When circumstances warrant, we review the carrying amounts of our property and equipment and our intangible assets (other than goodwill) to determine whether such carrying amounts continue to be recoverable. Such changes in circumstance may include (i) an expectation of a sale or disposal of a long-lived asset or asset group, (ii) adverse changes in market or competitive conditions, (iii) an adverse change in legal factors or business climate in the markets in which we operate and (iv) operating or cash flow losses. For purposes of impairment testing, long-lived assets are grouped at the lowest level for which cash flows are largely independent of other assets and liabilities, generally at or below the reporting unit level (see below). If the carrying amount of the asset or asset group is greater than the expected undiscounted cash flows to be generated by such asset or asset group, an impairment adjustment is recognized. Such adjustment is measured by the amount that the carrying value of such asset or asset group exceeds its fair value. We generally measure fair value by considering (a) sale prices for similar assets, (b) discounted estimated future cash flows using an appropriate discount rate and/or (c) estimated replacement cost. Assets to be disposed of are recorded at the lower of their carrying amount or fair value less costs to sell.

We evaluate goodwill for impairment at least annually on October 1 and whenever facts and circumstances indicate that the carrying amount of goodwill may not be recoverable. For impairment evaluations, we first make a qualitative assessment to determine if the goodwill may be impaired. If it is more-likely-than-not that a reporting unit's fair value is less than its carrying value, we then compare the fair value of the reporting unit to its respective carrying amount. Any excess of the carrying amount over the fair value would be charged to operations as an impairment loss. A reporting unit is an operating segment or one level below an operating segment (referred to as a "component"). If the carrying value of a reporting unit were to exceed its fair value, we would then compare the implied fair value of the reporting unit's goodwill to its carrying amount, and any excess of the carrying amount over the fair value would be charged to operations as an impairment loss.

When required, considerable management judgment is necessary to estimate the fair value of reporting units and underlying long-lived assets. We typically determine fair value using an income-based approach (discounted cash flows) based on assumptions in our long-range business plans and, in some cases, a combination of an income-based approach and a market-based approach. With respect to our discounted cash flow analysis used in the income-based approach, the timing and amount of future cash flows under these business plans require estimates of, among other items, subscriber growth and retention rates, rates charged per product, expected gross margins and Segment Adjusted EBITDA margins and expected property and equipment additions. The development of these cash flows, and the discount rate applied to the cash flows, is subject to inherent uncertainties, and actual results could vary significantly from such estimates. Our determination of the discount rate is based on a weighted average cost of capital approach, which uses a market participant's cost of equity and after-tax cost of debt and reflects the risks inherent in the cash flows. Based on the results of our 2021 qualitative assessment of our reporting unit carrying values, we determined that it was more-likely-than-not that fair value exceeded carrying value for all of our reporting units.

During the three years ended December 31, 2021, we did not record any significant impairment charges with respect to our property and equipment and intangible assets. For additional information regarding our long-lived assets, see note 8 to our combined financial statements.

If, among other factors, (i) our enterprise value or Liberty Global's equity values were to decline or (ii) the adverse impacts of economic, competitive, regulatory or other factors were to cause our results of operations or cash flows to be worse than anticipated, we could conclude in future periods that impairment charges are required in order to reduce the carrying values of our goodwill and, to a lesser extent, other long-lived assets. Any such impairment charges could be significant.

Costs Associated with Construction and Installation Activities

We capitalize costs associated with the construction of new fixed and mobile transmission and distribution facilities and the installation of new fixed-line services. Installation activities that are capitalized include (i) the initial connection (or drop) from our fixed-line system to a customer location, (ii) the replacement of a drop and (iii) the installation of equipment for additional services, such as broadband internet or fixed-line services. The costs of other customer-facing activities, such as reconnecting customer locations where a drop already exists, disconnecting customer locations and repairing or maintaining drops, are expensed as incurred.

The nature and amount of labor and other costs to be capitalized with respect to construction and installation activities involves significant judgment. In addition to direct external and internal labor and materials, we also capitalize other costs directly attributable to our construction and installation activities, including dispatch costs, quality-control costs, vehicle-related costs and certain warehouse-related costs. The capitalization of these costs is based on time sheets, time studies, standard costs, call tracking systems and other verifiable means that directly link the costs incurred with the applicable capitalizable activity. We continuously monitor the appropriateness of our capitalization policies and update the policies when necessary to respond to changes in facts and circumstances, such as the development of new products and services and changes in the manner that installations or construction activities are performed.

Fair Value Measurements

GAAP provides guidance with respect to the recurring and nonrecurring fair value measurements and for a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. Level 1 inputs are quoted market prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. Level 2 inputs are inputs other than quoted market prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for the asset or liability.

Recurring Valuations. We perform recurring fair value measurements with respect to our derivative instruments. We use cash flow valuation models to determine the fair values of our interest rate and foreign currency derivative instruments. For a detailed discussion of the inputs we use to determine the fair value of our derivative instruments, see note 7 to our combined financial statements. For additional information concerning our derivative instruments, see note 6 to our combined financial statements.

Changes in the fair values of our derivative instruments have had, and we believe will continue to have, a significant and volatile impact on our results of operations. During 2021, 2020 and 2019, we recognized net gains (losses) of \in 180.4 million, (\in 264.1 million) and \in 27.5 million, respectively, attributable to changes in the fair values of our derivative instruments.

As further described in note 7 to our combined financial statements, actual amounts received or paid upon the settlement or disposition of our derivative instruments may differ materially from the recorded fair values at December 31, 2021.

Nonrecurring Valuations. Our nonrecurring valuations are primarily associated with (i) the application of acquisition accounting and (ii) impairment assessments, both of which require that we make fair value determinations as of the applicable valuation date. In making these determinations, we are required to make estimates and assumptions that affect the recorded amounts, including, but not limited to, expected future cash flows, market comparables and discount rates, remaining useful lives of long-lived assets, replacement or reproduction costs of property and equipment and the amounts to be recovered in future periods from acquired net operating losses and other deferred tax assets. To assist us in making these fair value determinations, we may engage third-party valuation specialists. Our estimates in this area impact, among other items, the amount of depreciation and amortization, impairment charges and income tax expense or benefit that we report. Our estimates of fair value are based upon assumptions we believe to be reasonable, but which are inherently uncertain. A significant portion

of our long-lived assets were initially recorded through the application of acquisition accounting and all of our long-lived assets are subject to impairment assessments. For additional information, see notes 5, 7 and 8 to our combined financial statements.

Income Tax Accounting

We are required to estimate the amount of tax payable or refundable for the current year and the deferred tax assets and liabilities for the future tax consequences attributable to differences between the financial statement carrying amounts and income tax basis of assets and liabilities and the expected benefits of utilizing net operating loss and tax credit carryforwards, using enacted tax rates in effect for each taxing jurisdiction in which we operate for the year in which those temporary differences are expected to be recovered or settled. This process requires our management to make assessments regarding the timing and probability of the ultimate tax impact of such items.

Net deferred tax assets are reduced by a valuation allowance if we believe that it is more-likely-than-not such net deferred tax assets will not be realized. Establishing or reducing a tax valuation allowance requires us to make assessments about the timing of future events, including the probability of expected future taxable income and available tax planning strategies. At December 31, 2021, the aggregate valuation allowance provided against deferred tax assets was €1,525.0 million. The actual amount of deferred income tax benefits realized in future periods will likely differ from the net deferred tax assets reflected on our December 31, 2021 combined balance sheet due to, among other factors, possible future changes in income tax law, or interpretations thereof, in the jurisdictions in which we operate and differences between estimated and actual future taxable income. Any such factors could have a material effect on our current and deferred tax positions as reported in our combined financial statements. A high degree of judgment is required to assess the impact of possible future outcomes on our current and deferred tax positions.

Tax laws in jurisdictions in which we have a presence are subject to varied interpretation, and many tax positions we take are subject to significant uncertainty regarding whether the position will be ultimately sustained after review by the relevant tax authority. We recognize the financial statement effects of a tax position when it is more-likely-than-not, based on technical merits, that the position will be sustained upon examination. The determination of whether the tax position meets the more-likely-than-not threshold requires a facts-based judgment using all information available. In a number of cases, we have concluded that the more-likely-than-not threshold is not met and, accordingly, the amount of tax benefit recognized in our combined financial statements is different than the amount taken or expected to be taken in our tax returns. As of December 31, 2021, we had no unrecognized tax benefits for financial reporting purposes.

We are required to continually assess our tax positions, and the results of tax examinations or changes in judgment can result in substantial changes to our unrecognized tax benefits.

For additional information concerning our income taxes, see note 11 to our combined financial statements.

Management and Principal Shareholder

The managing director of the UPC Holding Group is Liberty Global Europe Management B.V., which is also an indirect subsidiary of Liberty Global. The managing director is authorized to conduct the day to day business of the relevant entities within the governance of Liberty Global and its subsidiaries.