2015 Annual Report

Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the Fiscal Year Ended December 31, 2015

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
Commission File No. 000-25826

HARMONIC INC.
(Exact name of Registrant as specified in its charter)

Delaware	**77-0201147**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**

4300 North First Street
San Jose, CA 95134
(408) 542-2500
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Securities registered pursuant to section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, par value $.001 per share	NASDAQ Global Select Market

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. **Yes** ☐ **No** ☒

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or 15(d) of the Exchange Act. **Yes** ☐ **No** ☒

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

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

Large accelerated filer	☐	**Accelerated filer**	☒
Non-accelerated filer	☐ **(Do not check if a smaller reporting company)**	**Smaller reporting company**	☐

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). **Yes** ☐ **No** ☒

Based on the closing sale price of the Common Stock on the NASDAQ Global Select Market on July 3, 2015, the aggregate market value of the voting Common Stock held by non-affiliates of the Registrant was approximately $446,231,000. Shares of Common Stock held by each executive officer and director and by each person who owns 5% or more of the outstanding Common Stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

The number of shares outstanding of the Registrant's Common Stock, $.001 par value, was 77,300,250 on March 21, 2016.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for the Registrant's 2015 Annual Meeting of Stockholders (which will be filed with the Securities and Exchange Commission within 120 days of the end of the fiscal year ended December 31, 2015) are incorporated by reference in Part III of this Annual Report on Form 10-K.

HARMONIC INC.

FORM 10-K

TABLE OF CONTENTS

		Page
	PART I	
ITEM 1	BUSINESS	4
ITEM 1A	RISK FACTORS	13
ITEM 1B	UNRESOLVED STAFF COMMENTS	31
ITEM 2	PROPERTIES	31
ITEM 3	LEGAL PROCEEDINGS	31
ITEM 4	MINE SAFETY DISCLOSURE	32
	PART II	
ITEM 5	MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES	33
ITEM 6	SELECTED FINANCIAL DATA	35
ITEM 7	MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	37
ITEM 7A	QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	53
ITEM 8	FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	55
ITEM 9	CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE	97
ITEM 9A	CONTROLS AND PROCEDURES	97
ITEM 9B	OTHER INFORMATION	97
	PART III	
ITEM 10	DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE	97
ITEM 11	EXECUTIVE COMPENSATION	98
ITEM 12	SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS	98
ITEM 13	CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE	98
ITEM 14	PRINCIPAL ACCOUNTANT FEES AND SERVICES	98
	PART IV	
ITEM 15	EXHIBITS AND FINANCIAL STATEMENT SCHEDULES	98
SIGNATURES		99
EXHIBIT INDEX		100

Table of Contents

Forward Looking Statements

Some of the statements contained in this Annual Report on Form 10-K are forward-looking statements that involve risk and uncertainties. The statements contained in this Annual Report on Form 10-K that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including, without limitation, statements regarding our expectations, beliefs, intentions or strategies regarding the future. In some cases, you can identify forward-looking statements by terminology such as, “may,” “will,” “should,” “expects,” “plans,” “anticipates,” “believes,” “intends,” “estimates,” “predicts,” “potential,” or “continue” or the negative of these terms or other comparable terminology. These forward-looking statements include, but are not limited to, statements regarding:

- developing trends and demands in the markets we address, particularly emerging markets;
- economic conditions, particularly in certain geographies, and in financial markets;
- new and future products and services;
- capital spending of our customers;
- our strategic direction, future business plans and growth strategy;
- industry and customer consolidation;
- expected demand for and benefits of our products and services;
- seasonality of revenue and concentration of revenue sources;
- the potential impact of our continuing stock repurchase plan;
- potential future acquisitions and dispositions;
- anticipated results of potential or actual litigation;
- our competitive environment;
- the impact of governmental regulation;
- anticipated revenue and expenses, including the sources of such revenue and expenses;
- expected impacts of changes in accounting rules;
- use of cash, cash needs and ability to raise capital; and
- the condition of our cash investments.

These statements are subject to known and unknown risks, uncertainties and other factors, which may cause our actual results to differ materially from those implied by the forward-looking statements. Important factors that may cause actual results to differ from expectations include those discussed in “Risk Factors” beginning on page 13 in this Annual Report on Form 10-K. All forward-looking statements included in this Annual Report on Form 10-K are based on information available to us on the date thereof, and we assume no obligation to update any such forward-looking statements. The terms “Harmonic,” the “Company,” “we,” “us,” “its,” and “our”, as used in this Annual Report on Form 10-K, refer to Harmonic Inc. and its subsidiaries and its predecessors as a combined entity, except where the context requires otherwise.

PART I

Item 1. *BUSINESS*

We design, manufacture and sell versatile and high performance video infrastructure products and system solutions that enable our customers to efficiently create, prepare and deliver a full range of video and broadband services to consumer devices, including televisions, personal computers, laptops, tablets and smart phones. We operate in two segments, Video and Cable Edge. Our Video business sells video processing and production and playout solutions and services worldwide to cable operators and satellite and telecommunications (telco) Pay-TV service providers, which we refer to collectively as "service providers," and to broadcast and media companies, including streaming new media companies. Our Cable Edge business sells cable edge solutions and related services, primarily to cable operators globally.

Across our two business segments, we derived approximately 56% of our revenue from the Americas in 2015. The Europe, Middle East and Africa (EMEA) and Asia Pacific (APAC) regions accounted for the remaining 25% and 19% of our 2015 revenue, respectively.

Harmonic was initially incorporated in California in June 1988, and was reincorporated in Delaware in May 1995. Our principal executive offices are located at 4300 North First Street, San Jose, California 95134. Our telephone number is (408) 542-2500. Our Internet website is http://www.harmonicinc.com. Other than the information expressly set forth in this Annual Report on Form 10-K, the information contained or referred to on our web site is not part of this report.

Industry Overview

Demand for Video Services Anytime, Anywhere

The delivery of television programming and Internet-based services to consumers continues to rapidly converge. Consumers increasingly seek a more personalized and dynamic video experience that can be delivered at any time to any location to a variety of devices, ranging from high-definition (HD) and ultra-high-definition (Ultra HD) televisions and Internet-enabled "smart" televisions, to traditional desktop and laptop computers, to mobile platforms such as smart phones and tablet computers. In this multiscreen video environment, video programming and content needs to be transformed into multiple formats, bit rates and resolutions for display on a broad range of devices.

Consumers have grown accustomed to watching video programming and content at their convenience rather than on fixed timeframes scheduled by service providers. "Time-shifting" technologies such as digital video recorders (DVRs) and video-on-demand (VOD) services are enabling this flexibility, and the introduction of network DVRs by some service providers has eliminated the need for local storage, allowing a subscriber to store programming on the service provider's servers for future playback at any time, on any device.

Consumers are also accustomed to video download and streaming services from new media companies such as Netflix, Hulu, Google (YouTube), Amazon (Amazon Instant Video) and Apple (iTunes). These and other similar services aggregate third-party and original content and stream video "over-the-top" (OTT) to any Internet-connected device utilizing Internet service providers' networks at no incremental infrastructure cost to the consumer. In response, a number of service providers and broadcast and media companies are now providing more of their own OTT streaming video services.

Demand for High Quality Video

Consumer demand for high quality video anytime, anywhere and on any device requires ever-increasing bandwidth capacity in service providers' networks, as well as technology that maximizes network bandwidth efficiency. With the advent of Ultra HD televisions and OTT services increasingly being rendered in "4K" high resolution and consuming approximately four times the bandwidth of traditional MPEG-4/AVC (H.264) HD channels, we believe next generation compression technologies, such as High Efficiency Video Compression (HEVC), will continue to steadily gain industry traction. HEVC offers approximately 50% improved bandwidth efficiency and improved picture quality when compared to the MPEG-4 compression standard more commonly used to transport video signals today.

Service Provider Trends

Service providers are competing intensely to offer higher quality video signals in HD, including evolving initiatives to deliver video in 4K Ultra HD resolution. Also, in response to the growing success of new media OTT streaming companies, in addition to the time-shifting technologies described above, service providers are broadly expanding their video streaming offerings to customers, for viewing on any device. Increasingly, these services are also featuring content in the bandwidth

intensive, high resolution 4K standard in order to provide consumers with higher value, differentiated video services. Service providers are developing and expanding their content delivery and Internet Protocol (IP) networks, and increasing the capacity and efficiency of their networks with investments in various delivery infrastructure technologies to, among other things, maximize video quality, minimize bandwidth utilization and enable new network capacity. We believe that the delivery of video over IP will continue to change traditional video viewing habits and distribution methods and may alter the traditional advertising and subscription business models of major service providers.

Service providers continue to consolidate to achieve greater economies of scale and subscriber concentration, and to compete more effectively, especially against the growing disruptive threat of OTT offerings. In addition, service providers continue to enhance and differentiate their offerings by creating and delivering their own branded content, either through organic in-house development of new content or through acquisitions of existing content brands. For example, Comcast, a cable operator, owns NBC Universal, a broadcast and media company, and Sky Broadcasting, a European satellite service provider, has developed its own channels and content.

Content Provider Trends

Content owners and media companies in the U.S. and internationally continue to launch OTT streaming offerings to reach consumers directly, with OTT streaming of live programming becoming increasingly relevant. These offerings may be in partnership or competition with service providers.

As service providers deliver more video services to more devices and platforms, they are increasingly requiring content providers to supply content that is properly formatted for each device. As the number and type of devices continue to grow, the lack of consistent video standards means content providers must reformat and package their content in dozens of different formats to enable their content to be viewable across different devices. As a result, some broadcast and media companies are beginning to outsource playout functionality to service providers.

Market Trends

Cable Market

To address increasing competition, reduce subscriber losses, increase average revenue per user (ARPU) and differentiate themselves, cable operators continue to focus on a number of initiatives to improve their product offerings:

- Bundled digital video, voice and high speed data services;
- Expansion of VOD libraries and on-demand service offerings;
- Refresh of the user experience with upgraded home set-top box solutions, network DVRs and content navigation tools;
- Video delivery over IP to broadband enabled consumer devices;
- Capacity enhancement of high-speed data services;
- Expansion of network capacity to support the growing number of available services, including HDTV in foreign markets; and
- Collaboration with content owners on offering access to on-line content.

To support this rapid expansion of service offerings, cable operators are investing in video processing solutions that can receive, process, and distribute content from a variety of sources to a broad array of consumer devices, video storage equipment, and servers to ingest, store and intelligently distribute content, complemented by the latest cable edge solutions to significantly scale broadband network capacity and speed.

Satellite and Telco Markets

Over 100 satellite operators around the world have established digital television services that serve tens of millions of subscribers. These services are capable of providing tens of thousands of channels, including an increasing number of HD channels and the introduction of Ultra HD channels. These linear services will likely continue to expand as operators offer premium packages targeted towards specific consumer groups, with the goal of gaining loyalty and expanding ARPU. In parallel, satellite operators have begun offering the same linear services and VOD options to their customer base via broadband-connected consumer devices such as smart phones, tablets and their own set-top boxes. These services are deployed in conjunction with content delivery networks (CDNs) and are accessible through partnerships, acquisitions or internal

investments. To support these new services, satellite operators are upgrading their video infrastructure in order to attain greater bandwidth efficiency and operational optimization in an increasingly complex environment.

Internationally, and specifically in emerging markets, satellite operators continue to enjoy substantial growth in their customer base, driven mainly by rapid economic development, which has resulted in a significantly growing middle class with disposable income. As this growth continues, it is expected that these satellite operators will expand their product offerings to leverage the growing customer base and increase overall revenue.

Over the past several years, telcos around the world have added video services as a competitive response to cable and satellite operators and as a potential source of revenue growth. As their businesses have grown and matured, they have also expanded their offerings in an effort to successfully compete in the video arena, including high quality HD content, larger VOD libraries, time-shifting television services, bundled voice, data and video packages, multiscreen video offerings to a broad range of devices, and branded mobile specific services. The last of these offerings, mobile wireless services, is a key competitive advantage for telcos today, as it provides a clear differentiator in anytime, anywhere service offerings for consumers looking to view content on the move. In developed markets, telcos are also making significant infrastructure investments, including VDSL2 Vectoring with plans to integrate this technology with the new G.Fast DSL standard, along with ongoing deployments of fiber-to-the-premises (FTTP) to enable very high-speed broadband connections for residences and businesses.

Broadcast and Media Markets

Network broadcasters, programmers and content owners transmit live programming of news and sports to their studios for subsequent broadcast, and deliver the same programming and content to service providers for distribution to their subscribers. These broadcasters generally produce their own news and sports highlight content, along with hundreds of channels of network programming that is played-to-air under strict reliability requirements.

In the terrestrial broadcasting market, operators in many countries in EMEA, APAC and South America are now required by regulation to convert from analog to digital transmission in order to free up broadcast spectrum. These broadcasters are faced with requirements of converting analog signals to digital signals prior to transmission over the air, as well as to distribute these new signals across a new terrestrial network. The conversion to digital transmission provides the opportunity to deliver new channels; HD, Ultra HD and 4K services; premium content and interactive services.

Media companies, in order to effectively address consumer demands, are expanding their offerings to support a wide range of live and linear content, and to make content available in higher quality video formats and on-demand. These trends are increasing demand for media servers and video optimized storage equipped to support higher resolution formats, and accelerating demand for functionally collapsed playout systems with integrated media orchestration software. In addition, distribution networks responsible for moving video content to service providers are being upgraded to handle larger volumes of digital content in more efficient formats and with greater flexibility.

New Media and OTT Market

OTT video streaming already accounts for well over half of downstream Internet traffic in North America, and new media OTT companies are aggressively pushing into international markets. These companies will continue to require high quality video processing solutions in order to process and distribute large amounts of content from a wide variety of sources to a broad array of consumer devices, and to optimize adaptive bitrate video streaming quality and bandwidth utilization. Also, some OTT companies are increasingly developing and introducing original content, and other new media companies are also in the process of developing program channels similar to channels currently available from service providers. We believe these developments may result in increased investments by OTT companies in video production and playout solutions.

Emerging Markets

With a rapidly growing middle class across emerging markets, we believe the Pay-TV business is poised for rapid growth over the coming decade in the Asia Pacific region, South Asia, the Middle East, Africa and Central and South America. We currently derive a meaningful portion of our revenue from countries in emerging markets. Many consumers who are entering the middle class are now able to afford a monthly video service to gain access to their favorite programs and movies. Considering the early stages of economic development in many of these regions, together with very large populations, we believe some of the leading video service providers serving emerging markets will experience high subscriber growth rates and may become worldwide industry leaders. In addition, since the video services currently available to consumers in these markets are generally more basic when compared to services available in more developed markets, we believe subscribers will demand increasingly sophisticated video services over time as consumer consumption trends in these markets track those in more developed markets. As a result, we believe that the infrastructure and technology investments of these service providers and new market entrants are likely to grow significantly for the foreseeable future.

Further, media companies addressing emerging markets are aggressively investing in the creation of new content, particularly content that is localized and responsive to consumer demands, with the goal of creating strong brands and a growing, loyal customer base. We believe that this growth in content creation will require these media companies to significantly increase their investments in video storage, processing and related technologies.

Our Video Business

Overview

We offer a range of products and solutions, as well as next-generation software-based media processing platforms that address the demand and market trends shaping our industry.

In light of more complicated workflows inherent in managing the delivery of greater quantities of content across multiple formats to a growing population of set-top-boxes and consumer electronic devices, we believe the industry is moving toward unified video processing systems. These systems incorporate historically discrete video processing functions in software, enabling significant cost efficiencies across the entire video workplace. Additionally, we believe there is gaining industry momentum towards network function virtualization, whereby core video chain functions are being re-engineered and collapsed to run on the latest Intel processors in order to leverage high-performance and scalable appliance-based hardware, or as software-only virtual instances designed to run on industry standard servers in data center environments.

From production studios to broadcast newsrooms, consumer demand for higher resolution video programming and more viewing options is escalating network touch points and server capacity needed to administer channel production and playout processes, thereby elevating costs and space restrictions. As more content is filmed in 4K and played-to-air on newly created channels supporting higher resolution HD and Ultra HD formats, these constraints are likely to be exacerbated and we believe these issues will create increased demand for functionally-collapsed playout systems with integrated media orchestration software. This type of software provides an automated control system that streamlines playout processes, improves video quality, and reduces server overhead by combining historically discrete video chain functions into a unified playout system where content can be ingested, formatted, stored and played-to-air.

We believe functionally collapsed video playout infrastructures with media orchestration systems, along with video optimized storage solutions, will enable content providers to produce more channels in higher resolution formats faster and more cost-effectively, and provide content in the widest possible range of formats and at the highest possible video quality.

As a result, service providers and broadcast and media companies are likely to make significant investments in these newly architected systems in the foreseeable future.

Video Products

Video Processing Solutions

Our video processing solutions, which include network management software and application software and hardware products, provide our customers with the ability to acquire a variety of signals from different sources and in different protocols in order to deliver a variety of real-time and stored content to their subscribers for viewing on a broad range of devices.

Broadcast and distribution encoders. Our Electra and Ion high performance encoders compress video, audio and data channels to low bit rates, while maintaining high video quality. Our encoders are available in multiple formats, including standard, HD and Ultra HD formats, using various codecs including the MPEG-2, MPEG-4, HEVC and AVS+ video compression standards, for both televisions and new multiscreen formats targeted at smart phones, tablets and broadband-connected televisions. Our Electra XVM software product is a completely virtualized media processor designed to run in virtual machine environments on blade servers, and is our first product based on our VOS platform, which is the next-generation software platform we are developing to unify the entire media processing chain, from ingest to delivery. Electra XVM supports a broad range of compression standards over constant bit rate (CBR), variable bit rate (VBR) and adaptive bit rate (ABR) encoding schemes, and includes integrated video graphics and branding as well as playout capabilities such as channel origination and linear ad insertion. Our encoding products are primarily used in real-time, linear video applications and to a lesser extent for encoding video content and storage for later delivery as VOD and time-shifted services.

Contribution encoders. Our Ellipse encoders provide broadcasters with video compression solutions for real-time news gathering, live sports coverage and other remote events, and enable our customers to deliver these feeds to their studios for further processing. Our latest models encode full-resolution 1080p60 video signals in AVC 4:2:2 10-bit, enabling the transmission of very high quality video, and include an integrated modulator which eliminates the need for a separate satellite uplink device. Broadcasters and other operators also use our contribution encoders for delivery of their programming to their customers, which are typically cable, telco and satellite operators.

Multiscreen transcoders and stream processing. Our ProStream real-time stream processor and transcoder products enable our customers to transcode standard definition (SD) and HD MPEG-2 and MPEG-4 video content for both broadcast and OTT mobile and web applications simultaneously. Our ProStream products also feature high-density, multiple SD or HD inputs and multiscreen output profiles; multiplexing; advanced remultiplexing, scrambling and descrambling; linear ad splicing into video streams; and integrated statmux pools.

Content preparation and delivery for multiscreen applications. Our ProMedia products enable high-quality broadcast, VOD and OTT services on any device, including live streaming, VOD, catch-up TV, start-over TV, and network DVR services through hypertext transfer protocol (HTTP) streaming. Our ProMedia software products enable file-based and real-time transcoding, stream packaging, and multiscreen workflow management. Our ProMedia Origin HTTP streaming video server product ingests transcoded, segmented and encrypted output from our ProMedia software products and enables high-volume live adaptive bitrate streaming and the delivery of time-shifted services.

Decoders and descramblers. Our ProView integrated receivers-decoder (IRD) products allow service providers to acquire content delivered via satellite, IP or terrestrial networks for distribution to their subscribers. These products are also used to decode signals backhauled from live news and sporting events in contribution applications and, more recently, are used by content owners looking to distribute their content in a controlled manner to a large base of video service providers.

Management and control software. Our NMX Digital Service Manager provides service providers with the ability to control and visually monitor their digital video infrastructure at an aggregate level, rather than as just discrete pieces of hardware, and is designed to be integrated into larger network management systems through the use of a simple network management protocol (SNMP). In addition, our Iris advanced video analytics software suite works in tandem with NMX to collect data from our Electra and Ion encoder products in order to provide video quality, global channel availability and source profiling measurements for hundreds of compressed channels. Our DMS video distribution management system provides broadcasters and content providers with software control tools over large numbers of our ProView IRD products, enabling flexible device or group addressability, entitlements and authorization management and over-the-air (OTA) in-band control of CDN elements.

Video Production Platforms and Playout Solutions

Our video production platforms consist of video-optimized storage and content management applications, which provide broadcast and media companies with file-based infrastructure to support video content production activities, such as editing, post-production and finishing. Our video playout solutions, including media orchestration software, are based on scalable video servers used by broadcast and media companies to create and playout television channels.

Video servers. Our Spectrum family of video server and storage products are used by broadcast and media companies to create play-to-air television channels. Our customers typically use these video server products to record incoming content from either live feeds or from tapes, encoding that content in real-time into standard media files that are then stored in the server's file system until the content is needed for playback as part of a scheduled playlist. Clips stored in the server are decoded in real-time and played-to-air according to a playout schedule in a frame-accurate, back-to-back manner to create a seamless television channel. Our servers support both SD and HD programming, with our latest software-upgradeable Spectrum X product able to support UltraHD programming, as well as many different media formats. Our new Polaris media orchestration software solutions work with our Spectrum products and provide our customers with playout management and control tools for channel-in-a-box and integrated channel playout applications.

Video-optimized storage. Our MediaGrid active storage system is a scale-out, network-attached storage system with a built-in media file system that has been optimized for typical read and write file operations found in media production workflows. Architected as a clustered storage system with a distributed file system, MediaGrid provides highly scalable storage capacity and access bandwidth to support demanding media production applications, such as video editing, content transformation and media library management. In addition, MediaGrid systems are increasingly being employed for VOD, time-shifted television services and OTT adaptive bitrate streaming.

Media Applications. Complementing our server and storage platforms, our Media Application Server (MAS), combined with a suite of integrated applications, provides a basic level of integrated media management and workflow control over content stored across our systems. For more complex media management, our underlying application programming interface, called Media Services Framework, allow both customers and other application developers to build advanced media management applications that can automate many media processing and movement tasks, collect and organize content metadata, and provide search and review functionality.

Our Cable Edge Business

[Table of Contents](#)

Overview

We believe the market and industry trends highlighted above are similarly creating opportunities for our Cable Edge business.

As consumption of VOD services accelerates, service provider demand for video edge QAMs increases. In addition, with heightened competition from non-cable service providers such as AT&T, Verizon, Google Fiber and local municipalities to deliver gigabit data rates, cable operators are aggressively driving enabling broadband access technologies, including the Converged Cable Access Platform (CCAP) architecture. We also believe the cable industry will move rapidly to DOCSIS 3.1, which enables increased bandwidth data transfer over existing broadband infrastructure as we begin migrating to distributed solutions.

In the last few years, the cable industry has begun to develop and promulgate the CCAP architecture for next-generation cable edge solutions, which combines edge QAM and CMTS functions in a single system in order to combine resources for video and data delivery. We believe centralized CCAP-based systems will significantly reduce cable headend costs and increase operational efficiency, and that the deployment of these systems will be an important step in cable operators' transition to all-IP networks.

In addition to centralized CCAP systems, we believe there is growing interest in complementary distributed remote PHY solutions, particularly in competitive gigabit service markets where cable operators are competing with FTTH services and are extending fiber access networks deeper into their distribution networks. This distributed access architecture alleviates power and space requirements of centralized systems at headend sites, and we believe will enable service providers to efficiently scale to support data and video growth.

Cable Edge Products

Edge QAM products. Our Narrowcast Services Gateway (NSG) products are fully integrated edge gateway products that integrate routing, multiplexing, scrambling and modulation into a single package for the delivery of narrowcast services to subscribers over cable networks. An NSG is usually supplied with single Gigabit Ethernet inputs or multiple Gigabit Ethernet inputs, allowing the cable operator to use bandwidth efficiently by delivering IP signals from the headend to the edge of the network for subsequent modulation onto a HFC network. Originally developed for VOD applications, the NSG has evolved to support multiple applications, including switched digital video and modular CMTS applications, as well as large-scale VOD deployments.

Centralized CCAP Solution. Our NSG Pro product is based on the current CCAP architecture and provides high-density, universal edge QAM capabilities with easy upgradeability to enable future CMTS capabilities. The CMTS feature, which is currently under development and testing by leading MSOs, would make our NSG Pro system fully compliant with current CCAP architecture requirements.

Distributed CCAP Solution. Our NSG Exo product is a cost-effective distributed CCAP device which enables the deployment of a Distributed Access Architecture (DAA) utilizing coax networks. The NSG Exo allows service providers to move their radio frequency (RF) delivery requirements out of the headend or hub and deeper into the distribution network, simplifying network design and operation to resolve power and space constraints, provide service flexibility, and lower capital and operational expenses.

We believe CCAP-based systems may, over time, replace and make obsolete current cable edge QAM products, as well as current CMTS products, since fully compliant CCAP-based solutions will combine the functionality of these products into one system. Since we historically have not addressed the CMTS market, we believe the NSG Pro and any other CCAP-based products we develop will have an opportunity to be sold into a significantly larger and growing market created by the CCAP standard.

Technical Support and Professional Services

We provide maintenance and support services to most of our customers under service level agreements that are generally renewed on an annual basis. We also provide consulting, implementation and integration services to our customers worldwide. We draw upon our expertise in broadcast television, communications networking and compression technology to design, integrate and install complete solutions for our customers, including integration with third-party products and services. We offer a broad range of services, including program management, technical design and planning, building and site preparation, integration and equipment installation, end-to-end system testing and comprehensive training.

Customers

We sell our products to a variety of cable, satellite and telco, and broadcast and media companies. Set forth below is a representative list of our significant end user and integrator/reseller customers, based, in part, on revenue during 2015.

United States	International
CenturyLink	Groupe Canal + SA
Charter Communications	Arqiva
Comcast Cable	Capella
Cox Communications	Dimension Data Netherlands
DigitalGlue	Huawei Technologies
DirecTV	Kabel Deutschland Vertrieb und Service
EchoStar Holding	OneBand Systems
Heartland Video	OOO Starline
Time Warner Cable	Sky Perfect JSAT
Turner Broadcasting	Virgin Media

Sales to our ten largest customers in 2015, 2014 and 2013 accounted for approximately 32%, 35% and 31% of our net revenue, respectively. Although we continue to seek to broaden our customer base by penetrating new markets and further expanding internationally, we expect to see continuing industry consolidation and customer concentration.

During 2015, 2014 and 2013, revenue from Comcast accounted for 12%, 16% and 12% of our net revenue, respectively. The loss of Comcast or any other significant customer, any material reduction in orders by Comcast or any significant customer, or our failure to qualify our new products with a significant customer could materially and adversely affect our operating results, financial condition and cash flows. In addition, we are involved in most quarters in one or more relatively large individual transactions. A decrease in the number of relatively larger individual transactions in which we are involved in any quarter could adversely affect our operating results for that quarter.

Sales and Marketing

In the U.S. and internationally, we sell our products through our own direct sales force, as well as through independent resellers and systems integrators. Our direct sales team is organized geographically and by major customers and markets to support customer requirements. Our principal sales offices outside of the U.S. are located in Europe and Asia, and we have a support center in Switzerland to support our international customers and operations. Our international resellers are generally responsible for importing our products and providing certain installation, technical support and other services to customers in their territory after receiving training from us.

Our direct sales force and resellers are supported by a highly trained technical staff, which includes application engineers who work closely with our customers to develop technical proposals and design systems to optimize system performance and economic benefits for our customers. Our technical support teams provide a customized set of services, as required, for ongoing maintenance, support-on-demand and training for our customers and resellers, both in our facilities and on-site.

Our product management organization develops strategies for product lines and markets and, in conjunction with our sales force, identifies the evolving technical and application needs of customers so that our product development resources can be most effectively and efficiently deployed to meet anticipated product requirements. Our product management organization is also responsible for setting price levels, demand forecasting and general support of the sales force, particularly at major accounts.

Our corporate marketing organization is responsible for building awareness of the Harmonic brand in our markets and driving engagement with our strategies, solutions and products. The group develops all of our corporate messaging and manages all customer and industry communication mechanisms, including advertising, our Web presence, speakers bureau, events and trade shows. The marketing organization also develops our corporate video assets, including 4K/Ultra HD content for displays and demos, and manages product launches and demand generation in conjunction with our sales force. We have many programs in place to heighten industry awareness of our products, including participation in technical conferences, publication of articles in industry journals and exhibitions at trade shows.

Manufacturing and Suppliers

We rely on third party contract manufacturers to assemble our products and the subassemblies and modules for our products. In 2003, we entered into an agreement with Plexus Services Corp. to act as our primary contract manufacturer.

Plexus currently provides us with a substantial majority, by dollar amount, of the products we purchase from our contract manufacturers. This agreement has automatic annual renewals, unless prior notice for nonrenewal is given, and has been automatically renewed until October 2016. We do not generally maintain long-term agreements with any of our contract manufacturers.

Many components, subassemblies and modules necessary for the manufacture or integration of our products are obtained from a sole supplier or a limited group of suppliers. While we expend considerable efforts to qualify additional component sources, consolidation of suppliers in the industry and the small number of viable alternatives have limited the results of these efforts. We do not generally maintain long-term agreements with any of our suppliers.

Intellectual Property

As of December 31, 2015, we held 59 issued U.S. patents and 35 issued foreign patents and had 30 patent applications pending. Although we attempt to protect our intellectual property rights through patents, trademarks, copyrights, licensing arrangements, maintaining certain technology as trade secrets and other measures, we cannot assure you that any patent, trademark, copyright or other intellectual property rights owned by us will not be invalidated, circumvented or challenged, that such intellectual property rights will provide competitive advantages to us, or that any of our pending or future patent applications will be issued with the claims, or the scope of the claims, sought by us, if at all. We cannot assure you that others will not develop technologies that are similar or superior to our technology, duplicate our technology or design around the patents that we own. In addition, effective patent, copyright and trade secret protection may be unavailable or limited in which we do business or may do business in the future.

We generally enter into confidentiality or license agreements with our employees, consultants, vendors and customers as needed, and generally limit access to, and distribution of, our proprietary information. However, no assurances can be given that these actions will prevent misappropriation of our technology. In addition, if necessary, we are prepared to take legal action, in the future, to enforce our patents and other intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others, or to defend against claims of infringement or invalidity. Any such litigation could result in substantial costs and diversion of resources, including management time, and could negatively affect our business, operating results, financial position and cash flows.

In order to successfully develop and market our products, we may be required to enter into technology development or licensing agreements with third parties. Although many companies are often willing to enter into such technology development or licensing agreements, we cannot assure you that such agreements can be negotiated on reasonable terms or at all. The failure to enter into technology development or licensing agreements, when necessary, could limit our ability to develop and market new products and could harm our business.

Backlog

We schedule production of our products and solutions based upon our backlog, open contracts, informal commitments from customers and sales projections. Our backlog consists of firm purchase orders by customers for delivery within the next 12 months, as well as deferred revenue that is expected to be recognized within the succeeding 12 months. Our backlog, including deferred revenue at December 31, 2015 was approximately $120.1 million. Delivery schedules on such orders may be deferred or canceled for a number of reasons, including reductions in capital spending by our customers or changes in specific customer requirements. In addition, due to annual capital spending budget cycles at many of our customers, the amount of our backlog at any given time is not necessarily indicative of actual revenues for any succeeding period.

Competition

The markets for video infrastructure systems are extremely competitive and have been characterized by rapid technological change and declining average selling prices. The principal competitive factors in these markets include product performance, reliability, price, breadth of product offering, sales and distribution capabilities, technical support and service, and relationships with end customers. We believe that we compete favorably in each of these categories.

Our competitors in our Video business segment include vertically integrated system suppliers, such as Arris Group, Cisco Systems and Ericsson, and, in certain product lines, other companies including ATEME and Sumavision Technologies. With respect to production and playout products, competitors include Evertz Microsystems, EVS, Grass Valley (a Belden brand) and Imagine Communications. Our competitors in our Cable Edge business include Arris, Casa Systems and Cisco Systems.

Consolidation in the industry has led to the acquisition of a number of our historic competitors over the last several years. For example, Motorola Home, BigBand Networks and C-Cor were acquired by Arris; NDS and Scientific Atlanta were

acquired by Cisco Systems; Envivio and Tandberg Television were acquired by Ericsson; Elemental Technologies was acquired by Amazon; and Miranda Technologies and Grass Valley were acquired by Belden Inc. Consequently, some of our principal competitors are substantially larger and have greater financial, technical, marketing and other resources than we have.

Research and Development

We have historically devoted a significant amount of our resources to research and development. Research and development expenses in 2015, 2014 and 2013 were approximately $87.5 million, $93.1 million and $99.9 million, respectively. Research and development expenses as a percent of revenue in 2015, 2014 and 2013 were approximately 23.2%, 21.5% and 21.6%, respectively. Our internal research and development activities are conducted primarily in the United States (California, Oregon, New York and New Jersey), Israel and Hong Kong. In addition, a portion of our research and development is conducted through third party partners with engineering resources in Ukraine and in India.

Our research and development program is primarily focused on developing new products and systems, and adding new features and other improvements to existing products and systems. Our development strategy is to identify features, products and systems, in both software and hardware solutions, that are, or are expected to be, needed by our customers. Our current research and development efforts are focused heavily on next-generation video processing solutions, including enhanced video compression, enhanced video quality, and multiscreen solutions. We also devote significant resources to production and playout and distribution solutions. Other research and development efforts are devoted to cable edge solutions for both video and data, particularly the development of products that will be fully compliant with the requirements of the CCAP architecture.

Our success in designing, developing, manufacturing and selling new or enhanced products will depend on a variety of factors, including the identification of market demand for new products, product selection, timely product design and development, product performance, effective manufacturing and assembly processes and sales and marketing. Because of the complexity inherent in such research and development efforts, we cannot assure you that we will successfully develop new products, or that new products developed by us will achieve market acceptance. Our failure to successfully develop and introduce new products would materially and adversely affect our business, operating results, financial condition and cash flows.

Employees

As of December 31, 2015, we employed a total of 989 people, including 364 in research and development, 184 in sales, 217 in service and support, 54 in operations, 68 in marketing (corporate and product), and 102 in a general and administrative capacity. Of those employees, 507 were located in the U.S. and 482 employees were located in foreign countries in South America, the Middle East, Europe, Asia and Canada. We also employ a number of temporary employees and consultants on a contract basis. None of our employees are represented by a labor union with respect to his or her employment with us. We have not experienced any work stoppages, and we consider our relations with our employees to be good.

Item 1A. *RISK FACTORS*

We depend on cable, satellite and telco, and broadcast and media industry capital spending for our revenue and any material decrease or delay in capital spending in any of these industries would negatively impact our operating results, financial condition and cash flows.

Our revenue has been derived from worldwide sales to service providers and broadcast and media companies, as well as, more recently, emerging streaming media companies. We expect that these markets will provide our revenue for the foreseeable future. Demand for our products will depend on the magnitude and timing of capital spending by customers in each of these markets for the purpose of creating, expanding or upgrading their systems. These capital spending patterns are dependent on a variety of factors, including:

• the impact of general economic conditions, actual and projected;

• access to financing;

• annual capital spending budget cycles of each of the industries we serve;

• the impact of industry consolidation;

• customers suspending or reducing capital spending in anticipation of: (i) new standards, such as HEVC and DOCSIS 3.1; (ii) industry trends and technology shifts, such as virtualization, and (iii) new products, such as products based on the VOS software platform or the CCAP architecture;

• federal, state, local and foreign government regulation of telecommunications, television broadcasting and streaming media;

• overall demand for communication services and consumer acceptance of new video and data technologies and services;

• competitive pressures, including pricing pressures;

• the impact of fluctuations in currency exchange rates; and

• discretionary end-user customer spending patterns.

In the past, specific factors contributing to reduced capital spending have included:

• weak or uncertain economic and financial conditions in the U.S. or one or more international markets;

• uncertainty related to development of digital video industry standards;

• delays in evaluations of new services, new standards and systems architectures by many operators;

• emphasis by operators on generating revenue from existing customers, rather than from new customers, through construction, expansion or upgrades;

• a reduction in the amount of capital available to finance projects of our customers and potential customers;

• proposed and completed business combinations and divestitures by our customers and the length of regulatory review of each;

• completion of a new system or significant expansion or upgrade to a system; and

• bankruptcies and financial restructuring of major customers.

In the past, adverse economic conditions in one or more of the geographies in which we offer our products have adversely affected our customers' capital spending in those geographies and, as a result, our business. During challenging economic

times, and in tight credit markets, many customers may delay or reduce capital expenditures. This could result in reductions in revenue from our products, longer sales cycles, difficulties in collection of accounts receivable, slower adoption of new technologies and increased price competition. If global economic and market conditions, or economic conditions in the U.S., Europe or other key markets, deteriorate, we could experience a material and adverse effect on our business, results of operations, financial condition and cash flows. Additionally, since most of our international revenue is denominated in U.S. dollars, global economic and market conditions may impact currency exchange rates and cause our products to become relatively more expensive to customers in a particular country or region, which could lead to delayed or reduced capital spending in those countries or regions, thereby negatively impacting our business and financial condition.

In addition, industry consolidation has in the past constrained, and may in the future constrain or delay, capital spending by our customers. Further, if our product portfolio and product development plans do not position us well to capture an increased portion of the capital spending of customers in the markets on which we focus, our revenue may decline.

As a result of these capital spending issues, we may not be able to maintain or increase our revenue in the future, and our operating results, financial condition and cash flows could be materially and adversely affected.

The markets in which we operate are intensely competitive.

The markets for our products are extremely competitive and have been characterized by rapid technological change and declining average sales prices in the past. Our competitors in our Video business segment include vertically integrated system suppliers, such as Arris Group, Cisco Systems and Ericsson, and, in certain product lines, other companies including ATEME and Sumavision Technologies. With respect to production and playout products, competitors include Evertz Microsystems, EVS, Grass Valley (a Belden brand) and Imagine Communications. Our competitors in our Cable Edge business include Arris, Casa Systems and Cisco Systems.

Many of our competitors are substantially larger, or as a result of consolidation activity have become larger, and have greater financial, technical, marketing and other resources than we have, and have been in operation longer than we have. Consolidation in the industry has led to the acquisition of a number of our historic competitors over the last several years. For example, Motorola Home, BigBand Networks and C-Cor were acquired by Arris; NDS and Scientific Atlanta were acquired by Cisco Systems; Envivio and Tandberg Television were acquired by Ericsson; Elemental Technologies was acquired by Amazon; and Miranda Technologies and Grass Valley were acquired by Belden Inc.

In addition, some of our larger competitors have more long-standing and established relationships with domestic and foreign customers. Many of these large enterprises are in a better position to withstand any significant reduction in capital spending by customers in our markets. They often have broader product lines and market focus, and may not be as susceptible to downturns in a particular market. These competitors may also be able to bundle their products together to meet the needs of a particular customer, and may be capable of delivering more complete solutions than we are able to provide. To the extent large enterprises that currently do not compete directly with us choose to enter our markets by acquisition or otherwise, competition would likely intensify.

Further, some of our competitors that have greater financial resources have offered, and in the future may offer, their products at lower prices than we offer for our competing products or on more attractive financing or payment terms, which has in the past caused, and may in the future cause, us to lose sales opportunities and the resulting revenue or to reduce our prices in response to that competition. Also, some competitors that are smaller than we are have engaged in, and may continue to engage in, aggressive price competition in order to gain customer traction and market share. Reductions in prices for any of our products could materially and adversely affect our operating margins and revenue.

Additionally, certain customers and potential customers have developed, and may continue to develop, their own solutions that may cause such customers or potential customers to not consider our product offerings or to displace our installed products with their own solutions. The growing availability of open source codecs and related software, as well as new server chipsets that incorporate encoding technology, has, in certain respects, lowered the barriers to entry for the video processing industry. The development of solutions by potential and existing customers and the reduction of the barriers to entry to enter the video processing industry could result in increased competition and adversely affect our results of operations and business.

If any of our competitors' products or technologies were to become the industry standard, our business could be seriously harmed. If our competitors are successful in bringing their products to market earlier than us, or if these products are more technologically capable than ours, our revenue could be materially and adversely affected.

We need to develop and introduce new and enhanced products in a timely manner to meet the needs of our customers and to remain competitive.

All of the markets we address are characterized by continuing technological advancement, changes in customer requirements and evolving industry standards. To compete successfully, we must continually design, develop, manufacture and sell new or enhanced products that provide increasingly higher levels of performance and reliability and meet our customers changing needs. However, we may not be successful in those efforts if, among other things, our products:

- are not cost effective;
- are not brought to market in a timely manner;
- are not in accordance with evolving industry standards;
- fail to meet market acceptance or customer requirements; or
- are ahead of the needs of their markets.

We are currently developing and marketing products based on the latest video compression standards, such as HEVC, which provides significantly greater compression efficiency, thereby making more bandwidth available to operators. At the same time, we continue to devote development resources to enhance the existing MPEG-4 AVC/H.264 compression of our products, which many of our customers continue to require. There can be no assurance that these efforts will be successful in the near future, or at all, or that our competitors will not take significant market share in encoding or transcoding.

In order to attempt to meet fast paced, dynamic, evolving standards and customer requirements, we are intensifying our development efforts on a number of our product solutions in our Video and Cable Edge businesses. Our VOS solution is a software-based, fully virtualized platform that we are developing to unify the entire media processing chain, from ingest to delivery, and which is designed to operate on common server hardware in data center environments. Electra XVM is our first video media processing and encoding product family based on this platform, with the latest version supporting HEVC compression. We believe some of our customers have been delaying their purchase decisions as they consider transitioning to virtualized solutions or wait for new products based on our VOS software platform, which has adversely affected our revenue from video products in recent periods. In our Cable Edge business, we continue to develop our CCAP solutions based on a distributed access architecture and utilizing our NSG Exo product, and we continue to develop, market and sell our NSG Pro centralized CCAP product solutions.

Many of these products and initiatives are intended to integrate existing and new features and functions in response to shifts in customer demands in the relevant market, as well as to general technology trends (such as virtualized and cloud-based computing, and integrated QAM and CMTS functionality in CCAP-based products) that we believe will significantly impact our industry. The success of these significant and costly development efforts will be predicated, for certain products and initiatives, on the timing of market adoption of the new standards on which the resulting products are based, and for other products, the timing of customer adoption of our products and solutions, as well as our ability to timely develop the features and capabilities of our products and solutions. If new standards or some of our new products are adopted later than we predict or not adopted at all, or if adoption occurs earlier than we are able to deliver the applicable products or functionality, we risk spending significant research and development time and dollars on products or features that may never achieve market acceptance or that miss the customer demand window and thus do not produce the revenue that a timely introduction would have likely produced.

If we fail to develop and market new and enhanced products on a timely basis, our operating results, financial condition and cash flows could be materially and adversely affected.

Our CCAP-based product initiatives expose us to certain technology transition risks that may adversely impact our operating results, financial condition and cash flows.

In the last few years, the cable industry has begun to develop and promulgate the CCAP architecture for next-generation cable edge solutions, which combines edge QAM and CMTS functions in a single system in order to combine resources for video and data delivery. We believe CCAP-based systems, both centralized and remote PHY solutions, will significantly reduce cable headend costs and increase operational efficiency, and are an important step in cable operators' transition to all-IP networks. We market and sell CCAP-based products, and are developing the CMTS capabilities to make our products fully-compliant with current and future CCAP architecture standards. If we are unsuccessful in developing these capabilities

in a timely manner, or are otherwise delayed in making such capabilities available to our customers, our business may be adversely impacted, particularly if our competitors develop and market fully compliant products before we do.

We believe CCAP-based systems may, over time, replace and make obsolete current cable edge QAM solutions, including our cable edge QAM products, as well as current CMTS solutions, which is a market our products have previously not addressed. If demand for our CCAP-based systems is weaker than expected, or sales of our CCAP-based systems do not adequately offset the expected decline in demand for our non-CCAP cable edge products, or the decline in demand for our non-CCAP cable edge products is more rapid and precipitous than expected, our near and long-term operating results, financial condition and cash flows could be adversely impacted. Moreover, if a new or competitive architecture for next-generation cable edge solutions is promulgated that renders our CCAP-based systems obsolete, our business may be adversely impacted.

Our future growth depends on market acceptance of several broadband services, on the adoption of new broadband technologies, and on several other broadband industry trends.

Future demand for many of our products will depend significantly on the growing market acceptance of emerging broadband services, including digital video, VOD, HDTV, IP video services (particularly streaming to tablet computers, connected TVs and mobile devices), and very high-speed data services. The market demand for such emerging services is rapidly growing, with many custom or proprietary systems in use, which increases the challenge of delivering interoperable products intended to address the requirements of such services.

The effective delivery of these services will depend, in part, on a variety of new network architectures, standards and devices, such as:

- the adoption of advanced video compression standards, such as next generation H.264 compression and HEVC;
- the CCAP architecture;
- fiber to the premises, or FTTP, networks designed to facilitate the delivery of video services by telcos;
- the greater use of protocols such as IP;
- the further adoption of bandwidth-optimization techniques, such as DOCSIS 3.0 and DOCSIS 3.1; and
- the introduction of new consumer devices, such as advanced set-top boxes, DVRs and network DVRs, connected TVs, tablet computers, and a variety of smart phone mobile devices.

If adoption of these emerging services and/or technologies is not as widespread or as rapid as we expect, or if we are unable to develop new products based on these technologies on a timely basis, our operating results, financial condition and cash flows could be materially and adversely affected.

Furthermore, other technological, industry and regulatory trends and requirements may affect the growth of our business. These trends and requirements include the following:

- convergence, whereby network operators bundle video, voice and data services to consumers, including mobile delivery options;
- the increasing availability of traditional broadcast video content and video-on-demand on the Internet;
- adoption of high-bandwidth technology, such as DOCSIS 3.x, next generation LTE and FTTP;
- the use of digital video by businesses, governments and educational institutions;
- efforts by regulators and governments in the U.S. and internationally to encourage the adoption of broadband and digital technologies, as well as to regulate broadband access and delivery;
- consumer interest in higher resolution video such as Ultra HD or retina-display technologies on mobile devices;
- the need to develop partnerships with other companies involved in video infrastructure workflow and broadband services;

• the continued adoption of the television viewing behaviors of consumers in developed economies by the growing middle class across emerging economies;

• the extent and nature of regulatory attitudes towards issues such as network neutrality, competition between operators, access by third parties to networks of other operators, local franchising requirements for telcos to offer video, and other new services, such as mobile video; and

• the outcome of disputes and negotiations between content owners and service providers regarding rights of service providers to store and distribute recorded broadcast content, which outcomes may drive adoption of one technology over another in some cases.

If we fail to recognize and respond to these trends, by timely developing products, features and services required by these trends, we are likely to lose revenue opportunities and our operating results, financial condition and cash flows could be materially and adversely affected.

We depend significantly on our international revenue and are subject to the risks associated with international operations, including those of our resellers, contract manufacturers and outsourcing partners, which may negatively affect our operating results.

Revenue derived from customers outside of the U.S. in the fiscal years ended December 31, 2015, 2014 and 2013 represented approximately 53%, 52% and 57% of our revenue, respectively. Although no assurance can be given with respect to international sales growth in any one or more regions, we expect that international revenue will likely continue to represent, from year to year, a majority, and potentially increasing, percentage of our annual revenue for the foreseeable future. A significant percentage of our revenue is generated from sales to resellers, value-added resellers (VARs) and systems integrators, particularly in emerging market countries. Furthermore, a significant percentage of our employees are based in our international offices and locations, and most of our contract manufacturing occurs outside of the U.S. In addition, we outsource a portion of our research and development activities to certain third party partners with development centers located in different countries, particularly Ukraine and India.

Our international operations, the international operations of our resellers, contract manufacturers and outsourcing partners, and our efforts to maintain and increase revenue in international markets are subject to a number of risks, which are generally greater with respect to emerging market countries, including the following:

• growth and stability of the economy in one or more international regions;

• fluctuations in currency exchange rates;

• changes in foreign government regulations and telecommunications standards;

• import and export license requirements, tariffs, taxes and other trade barriers;

• our significant reliance on resellers and others to purchase and resell our products and solutions, particularly in emerging market countries;

• availability of credit, particularly in emerging market countries;

• difficulty in collecting accounts receivable, especially from smaller customers and resellers, particularly in emerging market countries;

• compliance with the U.S. Foreign Corrupt Practices Act, or FCPA, the U.K. Bribery Act, particularly in emerging market countries and/or similar anti-corruption and anti-bribery laws;

• the burden of complying with a wide variety of foreign laws, treaties and technical standards;

• fulfilling "country of origin" requirements for our products for certain customers;

• difficulty in staffing and managing foreign operations;

• business and operational disruptions or delays caused by political, social and economic instability and unrest, including risks related to terrorist activity, particularly in emerging market countries (e.g., recent significant civil, political and economic disturbances in Russia and Ukraine);

• changes in economic policies by foreign governments, including the imposition and potential continued expansion of economic sanctions by the U.S. and the European Union on the Russian Federation; and

• business and economic disruptions and delays caused by outbreaks of disease, epidemics and potential pandemics.

We have certain international customers who are billed in their local currency, primarily the Euro, British pound and Japanese yen, which subjects us to foreign currency risk. In addition, a portion of our operating expenses relating to the cost of certain international employees, are denominated in foreign currencies, primarily the Israeli shekel, British pound, Euro, Singapore dollar, Chinese yuan and Indian rupee, although we do hedge against the Israeli shekel. Gains and losses on the conversion to U.S. dollars of accounts receivable, accounts payable and other monetary assets and liabilities arising from international operations may contribute to fluctuations in our operating results. Furthermore, payment cycles for international customers are typically longer than those for customers in the U.S. Unpredictable payment cycles could cause us to fail to meet or exceed the expectations of security analysts and investors for any given period.

Most of our international revenue is denominated in U.S. dollars, and fluctuations in currency exchange rates could cause our products to become relatively more expensive to customers in a particular country or region, leading to a reduction in revenue or profitability from sales in that country or region. The potential negative impact of a strong U.S. dollar on our business may be exacerbated by the significant devaluation of a number of foreign currencies. Also, if the U.S. dollar were to weaken against many foreign currencies, there can be no assurance that a weaker dollar would lead to growth in capital spending in foreign markets.

Our operations outside the U.S. also require us to comply with a number of U.S. and international regulations that prohibit improper payments or offers of payments to foreign governments and their officials and political parties for corrupt purposes. For example, our operations in countries outside the U.S. are subject to the FCPA and similar laws, including the U.K. Bribery Act. Our activities in certain emerging countries create the risk of unauthorized payments or offers of payments by one of our employees, consultants, sales agents or channel partners that could be in violation of various anti-corruption laws, even though these parties may not be under our control. Under the FCPA and U.K. Bribery Act, companies may be held liable for the corrupt actions taken by their directors, officers, employees, channel partners, sales agents, consultants, or other strategic or local partners or representatives. We have internal control policies and procedures with respect to FCPA compliance, have implemented FCPA training and compliance programs for our employees, and include in our agreements with resellers a requirement that those parties comply with the FCPA. However, we cannot provide assurances that our policies, procedures and programs will prevent violations of the FCPA or similar laws by our employees or agents, particularly in emerging market countries, and as we expand our international operations. Any such violation, even if prohibited by our policies, could result in criminal or civil sanctions against us.

The effect of one or more of these international risks could have a material and adverse effect on our business, financial condition, operating results and cash flows.

We purchase several key components, subassemblies and modules used in the manufacture or integration of our products from sole or limited sources, and we rely on contract manufacturers and other subcontractors.

Many components, subassemblies and modules necessary for the manufacture or integration of our products are obtained from a sole supplier or a limited group of suppliers. For example, we depend on one supplier for certain video encoding chips which are incorporated into several products. Our reliance on sole or limited suppliers, particularly foreign suppliers, and our reliance on contractors for manufacturing and installation of our products, involves several risks, including a potential inability to obtain an adequate supply of required components, subassemblies or modules; reduced control over costs, quality and timely delivery of components, subassemblies or modules; supplier discontinuation of components, subassemblies or modules we require; and timely installation of products.

These risks could be heightened during a substantial economic slowdown, because our suppliers and subcontractors are more likely to experience adverse changes in their financial condition and operations during such a period. Further, these risks could materially and adversely affect our business if one of our sole sources, or a sole source of one of our suppliers or contract manufacturers, is adversely affected by a natural disaster. While we expend resources to qualify additional component sources, consolidation of suppliers and the small number of viable alternatives have limited the results of these efforts. Managing our

supplier and contractor relationships is particularly difficult during time periods in which we introduce new products and during time periods in which demand for our products is increasing, especially if demand increases more quickly than we expect.

Plexus Services Corp., which manufactures our products at its facilities in Malaysia, currently serves as our primary contract manufacturer, and currently provides us with a substantial majority, by dollar amount, of the products that we purchase from our contract manufacturers. Most of the products manufactured by our Israeli operations are outsourced to another third party manufacturer in Israel. From time to time we assess our relationship with our contract manufacturers, and we do not generally maintain long-term agreements with any of our suppliers or contract manufacturers. Our agreement with Plexus has automatic annual renewals, unless prior notice is given by either party, and has been automatically renewed until October 2016.

Difficulties in managing relationships with any of our current contract manufacturers, particularly Plexus, that manufacture our products off-shore, or any of our suppliers of key components, subassemblies and modules used in our products, could impede our ability to meet our customers' requirements and adversely affect our operating results. An inability to obtain adequate and timely deliveries of our products or any materials used in our products, or the inability of any of our contract manufacturers to scale their production to meet demand, or any other circumstance that would require us to seek alternative sources of supply, could negatively affect our ability to ship our products on a timely basis, which could damage relationships with current and prospective customers and harm our business and materially and adversely affect our revenue and other operating results. Furthermore, if we fail to meet customers' supply expectations, our revenue would be adversely affected and we may lose sales opportunities, both short and long term, which could materially and adversely affect our business and our operating results, financial condition and cash flows. Increases, from time to time, in demand on our suppliers and subcontractors from our customers or from other parties have, on occasion, caused delays in the availability of certain components and products. In response, we may increase our inventories of certain components and products and expedite shipments of our products when necessary. These actions could increase our costs and could also increase our risk of holding obsolete or excess inventory, which, despite our use of a demand order fulfillment model, could materially and adversely affect our business, operating results, financial position and cash flows.

The loss of one or more of our key customers, a failure to continue diversifying our customer base, or a decrease in the number of larger transactions could harm our business and our operating results.

Historically, a significant portion of our revenue has been derived from relatively few customers, due in part to the consolidation of the ownership of cable television and direct broadcast satellite system companies. Sales to our top ten customers in the fiscal years ended December 31, 2015, 2014 and 2013 accounted for approximately 32%, 35% and 31% of revenue, respectively. Although we have broadened our customer base by further penetrating new markets and expanding internationally, we expect to see continuing industry consolidation and customer concentration.

In the fiscal years ended December 31, 2015, 2014 and 2013, revenue from Comcast accounted for approximately 12%, 16% and 12% of our revenue, respectively, and further consolidation in the cable industry could lead to additional revenue concentration for us. The loss of Comcast or any other significant customer, any material reduction in orders by Comcast or any other significant customer, or our failure to qualify our new products with a significant customer could materially and adversely affect, either long term or in a particular quarter, our operating results, financial condition and cash flows. In addition, we are involved in most quarters in one or more relatively large individual transactions. A decrease in the number of the relatively larger individual transactions in which we are involved in any quarter could materially and adversely affect our operating results for that quarter.

As a result of these and other factors, we may be unable to increase our revenues from some or all of the markets we address, or to do so profitably, and any failure to increase revenues and profits from these customers could materially and adversely affect our operating results, financial condition and cash flows.

We rely on resellers, value-added resellers and systems integrators for a significant portion of our revenue, and disruptions to, or our failure to develop and manage our relationships with these customers or the processes and procedures that support them could adversely affect our business.

We generate a significant percentage of our revenue through sales to resellers, value-added resellers (VARs) and systems integrators that assist us with fulfillment or installation obligations. We expect that these sales will continue to generate a significant percentage of our revenue in the future. Accordingly, our future success is highly dependent upon establishing and maintaining successful relationships with a variety of channel partners.

We generally have no long-term contracts or minimum purchase commitments with any of our reseller, VAR or system integrator customers, and our contracts with these parties do not prohibit them from purchasing or offering products or services

that compete with ours. Our competitors may provide incentives to any of our reseller, VAR or systems integrator customers to favor their products or, in effect, to prevent or reduce sales of our products. Any of our reseller, VAR or systems integrator customers may independently choose not to purchase or offer our products. Many of our resellers, and some of our VARs and system integrators are small, are based in a variety of international locations, and may have relatively unsophisticated processes and limited financial resources to conduct their business. Any significant disruption of our sales to these customers, including as a result of the inability or unwillingness of these customers to continue purchasing our products, or their failure to properly manage their business with respect to the purchase of, and payment for, our products, could materially and adversely affect our business, operating results, financial condition and cash flows. In addition, our failure to continue to establish or maintain successful relationships with reseller, VAR and systems integrator customers could likewise materially and adversely affect our business, operating results, financial condition and cash flows.

We have made, and may continue to make, acquisitions, and any acquisition could disrupt our operations, cause dilution to our stockholders and materially and adversely affect our business, operating results, cash flows and financial condition.

As part of our business strategy, from time to time we have acquired, and we may continue to acquire, businesses, technologies, assets and product lines that we believe complement or expand our existing business. For example, on February 29, 2016, we announced the closing of our acquisition of Thomson Video Networks, which is headquartered in Rennes, France. Acquisitions involve numerous risks, including the following:

- unanticipated costs or delays associated with an acquisition;

- difficulties in the assimilation and integration of acquired operations, technologies and/or products;

- potential disruption of our business and the diversion of management’s attention from the regular operations of the business during the acquisition process;

- the challenges of managing a larger and more geographically widespread operation and product portfolio after the closing of the acquisition;

- potential adverse effects on new and existing business relationships with suppliers, contract manufacturers, resellers, partners and customers;

- compliance with regulatory requirements, such as local employment regulations and organized labor in France;

- risks associated with entering markets in which we may have no or limited prior experience;

- the potential loss of key employees of acquired businesses and our own business as a result of integration;

- difficulties in bringing acquired products and businesses into compliance with applicable legal requirements in jurisdictions in which we operate and sell products;

- impact of known potential liabilities or unknown liabilities, including litigation and infringement claims, associated with companies we acquire;

- substantial charges for acquisition costs or for the amortization of certain purchased intangible assets, deferred stock compensation or similar items;

- substantial impairments to goodwill or intangible assets in the event that an acquisition proves to be less valuable than the price we paid for it;

- delays in realizing, or failure to realize, the anticipated benefits of an acquisition; and

- the possibility that any acquisition may be viewed negatively by our customers or investors or the financial markets.

Competition within our industry for acquisitions of businesses, technologies, assets and product lines has been, and is likely to continue to be, intense. As such, even if we are able to identify an acquisition that we would like to consummate, we may not be able to complete the acquisition on commercially reasonable terms or because the target chooses to be acquired by another company. Furthermore, in the event that we are able to identify and consummate any future acquisitions, we may, in each of those acquisitions:

• issue equity securities which would dilute current stockholders' percentage ownership;

• incur substantial debt to finance the acquisition or assume substantial debt in the acquisition;

• incur significant acquisition-related expenses;

• assume substantial liabilities, contingent or otherwise; or

• expend significant cash.

These financing activities or expenditures could materially and adversely affect our operating results, cash flows and financial condition or the price of our common stock. Alternatively, due to difficulties in the capital or credit markets at the time, we may be unable to secure capital necessary to complete an acquisition on reasonable terms, or at all. Moreover, even if we were to obtain benefits from acquisitions in the form of increased revenue and earnings per share, there may be a delay between the time the expenses associated with an acquisition are incurred and the time we recognize such benefits.

As of December 31, 2015, we had approximately $198 million of goodwill recorded on our balance sheet associated with prior acquisitions. In the event we determine that our goodwill is impaired, we would be required to write down all or a portion of such goodwill, which could result in a material non-cash charge to our results of operations in the period in which such write-down occurs.

If we are unable to successfully address one or more of these risks, our business, operating results, financial condition and cash flows could be materially and adversely affected.

We may not be able to effectively manage our operations.

We have grown significantly, principally through acquisitions, and expanded our international operations. For example, upon the closing of our acquisition of Thomson Video Networks on February 29, 2016, we added approximately 450 employees, most of whom are based in France.

As of December 31, 2015, we had 482 employees in our international operations, representing approximately 49% of our worldwide workforce. Our ability to manage our business effectively in the future, including with respect to any future growth, our operation as both a hardware and increasingly software-centric business, the integration of any acquisition efforts such as our recent purchase of Thomson Video Networks, and the breadth of our international operations, will require us to train, motivate and manage our employees successfully, to attract and integrate new employees into our overall operations, to retain key employees and to continue to improve and evolve our operational, financial and management systems. There can be no assurance that we will be successful in any of these efforts, and our failure to effectively manage our operations could have a material and adverse effect on our business, operating results, cash flows and financial condition.

We face risks associated with having outsourced engineering resources located in Ukraine.

We outsource a portion of our research and development activities to a third-party partner with engineering resources located in Ukraine. Political, social and economic instability and unrest or violence in Ukraine, including the ongoing conflict with Russian-backed separatists or conflict with the Russian Federation directly, could cause disruptions to the business and operations of our outsourcing partner, which could slow or delay the development work our partner is undertaking for us. Instability, unrest or conflict could limit or prevent our employees from traveling to, from, or within Ukraine to direct and coordinate our outsourced engineering teams, or cause us to shift all or portions of the development work occurring in Ukraine to other locations or countries. The resulting delays could negatively impact our product development efforts, operating results and our business.

We face risks associated with having facilities and employees located in Israel.

As of December 31, 2015, we maintained facilities in Israel with a total of 173 employees, or approximately 17% of our worldwide workforce. Our employees in Israel engage in a number of activities, including research and development, product development, and supply chain management for certain product lines and sales activities.

As such, we are directly affected by the political, economic and military conditions affecting Israel. Any significant conflict involving Israel could have a direct effect on our business or that of our Israeli contract manufacturers, in the form of

physical damage or injury, restrictions from traveling or reluctance to travel to from or within Israel by our Israeli and other employees or those of our subcontractors, or the loss of Israeli employees to active military duty. Most of our employees in Israel are currently obligated to perform annual reserve duty in the Israel Defense Forces, and approximately 7% of those employees were called for active military duty in 2015. In the event that more of our employees are called to active duty, certain of our research and development activities may be significantly delayed and adversely affected. Further, the interruption or curtailment of trade between Israel and its trading partners, as a result of terrorist attacks or hostilities, conflicts between Israel and any other Middle Eastern country or organization, or any other cause, could significantly harm our business. Additionally, current or future tensions or conflicts in the Middle East could materially and adversely affect our business, operating results, financial condition and cash flows.

Our operating results are likely to fluctuate significantly and, as a result, may fail to meet or exceed the expectations of securities analysts or investors, causing our stock price to decline.

Our operating results have fluctuated in the past and are likely to continue to fluctuate in the future, on an annual and a quarterly basis, as a result of several factors, many of which are outside of our control. Some of the factors that may cause these fluctuations include:

• the level and timing of capital spending of our customers in the U.S., Europe and in other foreign markets;

• economic and financial conditions specific to each of the cable, satellite and telco, and broadcast and media industries, as well as general economic and financial market conditions;

• changes in market acceptance of and demand for our products or our customers' services or products;

• the timing and amount of orders, especially from large individual transactions and transactions with our significant customers;

• the mix of our products sold and the effect it has on gross margins;

• the timing of revenue recognition, including revenue recognition on sales arrangements and from transactions with significant service and support components, which may span several quarters;

• the timing of completion of our customers' projects;

• the length of each customer product upgrade cycle and the volume of purchases during the cycle;

• competitive market conditions, including pricing actions by our competitors;

• the level and mix of our domestic and international revenue;

• new product introductions by our competitors or by us;

• changes in domestic and international regulatory environments affecting our business;

• the evaluation of new services, new standards and system architectures by our customers;

• the cost and timely availability to us of components, subassemblies and modules;

• the mix of our customer base, by industry and size, and sales channels;

• changes in our operating and extraordinary expenses;

• the timing of acquisitions and dispositions by us and the financial impact of such transactions;

• impairment of our goodwill and intangibles;

• the impact of litigation, such as related litigation expenses and settlement costs;

• write-downs of inventory and investments;

• changes in our effective federal tax rate, including as a result of changes in our valuation allowance against our deferred tax assets, and changes in our effective state tax rates, including as a result of apportionment;

• changes to tax rules related to the deferral of foreign earnings and compliance with foreign tax rules;

• the impact of applicable accounting guidance on accounting for uncertainty in income taxes that requires us to establish reserves for uncertain tax positions and accrue potential tax penalties and interest; and

• the impact of applicable accounting guidance on business combinations that requires us to record charges for certain acquisition related costs and expenses and generally to expense restructuring costs associated with a business combination subsequent to the acquisition date.

The timing of deployment of our products by our customers can be subject to a number of other risks, including the availability of skilled engineering and technical personnel, the availability of third party equipment and services, our customers' ability to negotiate and enter into rights agreements with video content owners that provide the customers with the right to deliver certain video content, and our customers' need for local franchise and licensing approvals.

We often recognize a substantial portion of our quarterly revenue in the last month of the quarter. We establish our expenditure levels for product development and other operating expenses based on projected revenue levels for a specified period, and expenses are relatively fixed in the short term. Accordingly, even small variations in the timing of revenue, particularly from relatively large individual transactions, can cause significant fluctuations in operating results in a particular quarter.

As a result of these factors and other factors, our operating results in one or more future periods may fail to meet or exceed the expectations of securities analysts or investors. In that event, the trading price of our common stock would likely decline.

Fluctuations in our future effective tax rates could affect our future operating results, financial condition and cash flows.

We are required to periodically review our deferred tax assets and determine whether, based on available evidence, a valuation allowance is necessary. The realization of our deferred tax assets, which are predominantly in the U.S., is dependent upon the generation of sufficient U.S. and foreign taxable income in the future to offset these assets. Based on our evaluation, a history of operating losses in recent years has led to uncertainty with respect to our ability to realize certain of our net deferred tax assets, and as a result we recorded a net increase in valuation allowance of $29.0 million and $3.1 million in 2014 and 2015, respectively, against U.S. net deferred tax assets.

The calculation of tax liabilities involves dealing with uncertainties in the application of complex global tax regulations. We recognize potential liabilities for anticipated tax audit issues in the U.S. and other tax jurisdictions based on our estimate of whether, and the extent to which, additional taxes will be due. In the event we determine that it is appropriate to create a reserve or increase an existing reserve for any such potential liabilities, the amount of the additional reserve is charged as an expense in the period in which it is determined. If payment of these amounts ultimately proves to be unnecessary, the reversal of the liabilities would result in tax benefits being recognized in the period when we determine the liabilities are no longer necessary. If the estimate of tax liabilities proves to be less than the ultimate tax assessment for the applicable period, a further charge to expense in the period such short fall is determined would result. Either such charge to expense could have a material and adverse effect on our operating results for the applicable period.

We continue to be in the process of expanding our international operations and staffing to better support our expansion into international markets. This expansion involves the implementation of an international structure that includes, among other things, an international support center in Europe, research and development cost sharing arrangements, and certain licenses and other contractual arrangements between us and our wholly-owned domestic and foreign subsidiaries. As a result of these changes, we anticipate that our consolidated pre-tax income will be subject to foreign tax at relatively lower tax rates when compared to the U.S. federal statutory tax rate and, as a consequence, our effective income tax rate is expected to be lower than the U.S. federal statutory rate.

Our future effective income tax rates could be adversely affected if tax authorities challenge our international tax structure or if the relative mix of U.S. and international income changes for any reason. Accordingly, there can be no assurance that our income tax rate will be less than the U.S. federal statutory rate in future periods.

We or our customers may face intellectual property infringement claims from third parties.

Our industry is characterized by the existence of a large number of patents and frequent claims and related litigation regarding patent and other intellectual property rights. In particular, leading companies in the telecommunications industry have extensive patent portfolios. Also, patent infringement claims and litigation by entities that purchase or control patents, but do not produce goods or services covered by the claims of such patents (so-called "non-practicing entities" or "NPEs"), have increased rapidly over the last decade or so. From time to time, third parties, including NPEs, have asserted, and may assert in the future, patent, copyright, trademark and other intellectual property rights against us or our customers. For example, in October 2011, Avid Technology, Inc. filed a complaint against us in the United States District Court for the District of Delaware alleging that our MediaGrid product infringes two patents held by Avid. In February 2014, a jury determined that we had not infringed on either of these patents. Avid filed an appeal with respect to the jury's verdict and in January 2016, the Federal Circuit issued an order vacating the verdict of noninfringement and remanding the case to the trial court for a new trial on infringement. On February 26, 2016, Harmonic filed a request for rehearing and rehearing en banc at the Federal Circuit. Our suppliers and their customers, including us, may have similar claims asserted against them. A number of third parties, including companies with greater financial and other resources than us, have asserted patent rights to technologies that are important to us.

Any intellectual property litigation, regardless of its outcome, could result in substantial expense and significant diversion of the efforts of our management and technical personnel. An adverse determination in any such proceeding could subject us to significant liabilities and temporary or permanent injunctions and require us to seek licenses from third parties or pay royalties that may be substantial. Furthermore, necessary licenses may not be available on terms satisfactory to us, or at all. An unfavorable outcome on any such litigation matter could require that we pay substantial damages, could require that we pay ongoing royalty payments, or could prohibit us from selling certain of our products. Any such outcome could have a material and adverse effect on our business, operating results, financial condition and cash flows.

Our suppliers and customers may have intellectual property claims relating to our products asserted against them. We have agreed to indemnify some of our suppliers and most of our customers for patent infringement relating to our products. The scope of this indemnity varies, but, in some instances, includes indemnification for damages and expenses (including reasonable attorney's fees) incurred by the supplier or customer in connection with such claims. If a supplier or a customer seeks to enforce a claim for indemnification against us, we could incur significant costs defending such claim, the underlying claim or both. An adverse determination in either such proceeding could subject us to significant liabilities and have a material and adverse effect on our operating results, cash flows and financial condition.

We may be the subject of litigation which, if adversely determined, could harm our business and operating results.

We may be subject to claims arising in the normal course of business. The costs of defending any litigation, whether in cash expenses or in management time, could harm our business and materially and adversely affect our operating results and cash flows. An unfavorable outcome on any litigation matter could require that we pay substantial damages, or, in connection with any intellectual property infringement claims, could require that we pay ongoing royalty payments or prohibit us from selling certain of our products. In addition, we may decide to settle any litigation, which could cause us to incur significant settlement costs. A settlement or an unfavorable outcome on any litigation matter could have a material and adverse effect on our business, operating results, financial condition and cash flows.

We may sell one or more of our product lines, from time to time, as a result of our evaluation of our products and markets, and any such divestiture could adversely affect our continuing business and our expenses, revenues, results of operation, cash flows and financial position.

We periodically evaluate our various product lines and may, as a result, consider the divestiture of one or more of those product lines. For example, in February 2013, we entered into an Asset Purchase Agreement with Aurora Networks pursuant to which we agreed to sell our cable access HFC Business for $46 million in cash. Any such divestiture could adversely affect our continuing business and expenses, revenues, results of operations, cash flows and financial position.

Divestitures of product lines have inherent risks, including the expense of selling the product line, the possibility that any anticipated sale will not occur, delays in closing any sale, the risk of lower-than-expected proceeds from the sale of the divested business, unexpected costs associated with the separation of the business to be sold from the seller's information technology and other operating systems, and potential post-closing claims for indemnification or breach of transition services obligations of the seller. Expected cost savings, which are offset by revenue losses from divested businesses, may also be difficult to achieve or maximize due to the seller's fixed cost structure, and a seller may experience varying success in reducing fixed costs or transferring liabilities previously associated with the divested business.

Our operating results could be adversely affected by natural disasters affecting the Company or impacting our third-party manufacturers, suppliers, resellers or customers.

Our corporate headquarters is located in California, which is prone to earthquakes. We have employees, consultants and contractors located in regions and countries around the world. In the event that any of our business, sales or research and development centers or offices in the U.S. or internationally are adversely affected by an earthquake or by any other natural disaster, we may sustain damage to our operations and properties, which could cause a sustained interruption or loss of affected operations, and cause us to suffer significant financial losses.

We rely on third-party contract manufacturers for the production of our products. Any significant disruption in the business or operations of such manufacturers or of their or our suppliers could adversely impact our business. Our principal contract manufacturers and several of their and our suppliers and our resellers have operations in locations that are subject to natural disasters, such as severe weather, tsunamis, floods and earthquakes, which could disrupt their operations and, in turn, our operations.

In addition, if there is a natural disaster in any of the locations in which our significant customers are located, we face the risk that our customers may incur losses or sustained business interruption, or both, which may materially impair their ability to continue their purchase of products from us. Accordingly, natural disaster in one of the geographies in which we, or our third-party manufacturers, their or our suppliers or our customers, operate could have a material and adverse effect on our business, operating results, cash flows and financial condition.

In order to manage our growth, we must be successful in addressing management succession issues and attracting and retaining qualified personnel.

Our future success will depend, to a significant extent, on the ability of our management to operate effectively, both individually and as a group. We must successfully manage transition and replacement issues that may result from the departure or retirement of members of our executive management. We cannot provide assurances that changes of management personnel in the future would not cause disruption to operations or customer relationships or a decline in our operating results.

We are also dependent on our ability to retain and motivate our existing highly qualified personnel, in addition to attracting new highly qualified personnel. Competition for qualified management, technical and other personnel is often intense, and we may not be successful in attracting and retaining such personnel. Competitors and others have in the past attempted, and are likely in the future to attempt, to recruit our employees. While our employees are required to sign standard agreements concerning confidentiality and ownership of inventions, we generally do not have employment contracts or non-competition agreements with any of our personnel. The loss of the services of any of our key personnel, the inability to attract or retain highly qualified personnel in the future or delays in hiring such personnel, particularly senior management and engineers and other technical personnel, could negatively affect our business and operating results.

We could be negatively affected as a result of a future proxy contest and the actions of activist stockholders.

If a proxy contest with respect to election of our directors is initiated in the future, or if other activist stockholder activities occur, our business could be adversely affected because:

- responding to a proxy contest and other actions by activist stockholders can be costly and time-consuming, disrupting our operations and diverting the attention of management and our employees;

- perceived uncertainties as to our future direction caused by activist activities may result in the loss of potential business opportunities, and may make it more difficult to attract and retain qualified personnel and business partners; and

- if individuals are elected to our Board of Directors (the “Board”) with a specific agenda, it may adversely affect our ability to effectively and timely implement our strategic plans.

Our failure to adequately protect our proprietary rights and data may adversely affect us.

At December 31, 2015, we held 59 issued U.S. patents and 35 issued foreign patents, and had 30 patent applications pending. Although we attempt to protect our intellectual property rights through patents, trademarks, copyrights, licensing arrangements, maintaining certain technology as trade secrets and other measures, we can give no assurances that any patent,

trademark, copyright or other intellectual property rights owned by us will not be invalidated, circumvented or challenged, that such intellectual property rights will provide competitive advantages to us, or that any of our pending or future patent applications will be issued with the scope of the claims sought by us, if at all. We can give no assurances that others will not develop technologies that are similar or superior to our technologies, duplicate our technologies or design around the patents that we own. In addition, effective patent, copyright and trade secret protection may be unavailable or limited in certain foreign countries in which we do business or may do business in the future.

We generally enter into confidentiality or license agreements with our employees, consultants, and vendors and our customers, as needed, and generally limit access to, and distribution of, our proprietary information. Nevertheless, we cannot provide assurances that the steps taken by us will prevent misappropriation of our technology. In addition, we have taken in the past, and may take in the future, legal action to enforce our patents and other intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others, or to defend against claims of infringement or invalidity. Such litigation could result in substantial costs and diversion of management time and other resources, and could materially and adversely affect our business, operating results, financial condition and cash flows.

Recently reported hacking attacks on government and commercial computer systems, particularly attacks sponsored by foreign governments or enterprises, raise the risks that such an attack may compromise, in a material respect, one or more of our computer systems and permit hackers access to our proprietary information and data. If such an attack does, in fact, allow access to or theft of our proprietary information or data, our business, operating results, financial condition and cash flows could be materially and adversely affected.

Our products include third-party technology and intellectual property, and our inability to acquire new technologies or use third-party technology in the future could harm our business.

In order to successfully develop and market certain of our planned products, we may be required to enter into technology development or licensing agreements with third parties. Although companies with technology useful to us are often willing to enter into technology development or licensing agreements with respect to such technology, we cannot provide assurances that such agreements may be negotiated on commercially reasonable terms, or at all. The failure to enter, or a delay in entering, into such technology development or licensing agreements, when necessary or desirable, could limit our ability to develop and market new products and could materially and adversely affect our business.

We incorporate certain third-party technologies, including software programs, into our products, and, as noted, intend to utilize additional third-party technologies in the future. In addition, the technologies that we license may not operate properly or as specified, and we may not be able to secure alternatives in a timely manner, either of which could harm our business. We could face delays in product releases until alternative technology can be identified, licensed or developed, and integrated into our products, if we are able to do so at all. These delays, or a failure to secure or develop adequate technology, could materially and adversely affect our business, operating results, financial condition and cash flows.

Our use of open source software in some of our products may expose us to certain risks.

Some of our products contain software modules licensed for use from third-party authors under open source licenses. Use and distribution of open source software may entail greater risks than use of third-party commercial software, as open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. Some open source licenses contain requirements that we make available source code for modifications or derivative works we create based upon the type of open source software we use. If we combine our proprietary software with open source software in a certain manner, we could, under certain of the open source licenses, be required to release the source code of our proprietary software to the public. This could allow our competitors to create similar products with lower development effort and in less time and ultimately could result in a loss of product sales for us.

Although we monitor our use of open source closely, it is possible our past, present or future use of open source has triggered or may trigger the foregoing requirements. Furthermore, the terms of many open source licenses have not been interpreted by U.S. courts, and there is a risk that such licenses could be construed in a manner that could impose unanticipated conditions or restrictions on our ability to commercialize our products. In such event, we could be required to seek licenses from third parties in order to continue offering our products, to re-engineer our products or to discontinue the sale of our products in the event re-engineering cannot be accomplished on a timely basis, any of which could materially and adversely affect our operating results, financial condition and cash flows.

We cannot assure you that our stock repurchase program will result in repurchases of our common stock or enhance long term stockholder value, and repurchases, if any, could affect our stock price and increase its volatility and will diminish our cash reserves.

In April 2013, our Board approved a modified "Dutch Auction" tender offer to repurchase up to $100 million of shares of our common stock. The tender offer expired on May 24, 2013, and resulted in our repurchasing approximately 12 million shares of our common stock, at $6.25 per share, for an aggregate purchase price of approximately $75 million.

Following the tender offer, we resumed purchases under our stock repurchase program. Under the program, we are authorized to repurchase up to $300 million of our common stock in open market transactions or pursuant to any trading plan that may be adopted in accordance with Rule 10b5-1 of the Exchange Act. As of December 31, 2015, we had purchased an aggregate of $254 million of our common stock under this program, including under the tender offer. The timing and actual number of shares repurchased, if any, will depend on a variety of factors, including the price and availability of our shares, trading volume, general market conditions and projected cash positions. The program was suspended prior to the announcement of the tender offer, and may be suspended or discontinued at any time in the future without prior notice.

Repurchases pursuant to our tender offer and our stock repurchase program could affect our stock price and increase its volatility and will reduce the market liquidity for our stock. Additionally, these repurchases will diminish our cash reserves, which could impact our ability to pursue possible future strategic opportunities and acquisitions and would result in lower overall returns on our cash balances. There can be no assurance that any stock repurchases will, in fact, occur, or, if they occur, that they will enhance stockholder value because the market price of our common stock may decline below the levels at which we repurchased shares of stock. Although our tender offer and our stock repurchase program are intended to enhance long-term stockholder value, short-term stock price fluctuations could reduce the effectiveness of these repurchases.

We are subject to import and export controls that could subject us to liability or impair our ability to compete in international markets.

Our products are subject to U.S. export controls, and may be exported outside the U.S. only with the required level of export license or through an export license exception, in most cases because we incorporate encryption technology into our products. In addition, various countries regulate the import of certain technology and have enacted laws that could limit our ability to distribute our products, or could limit our customers' ability to implement our products, in those countries. Changes in our products or changes in export and import regulations may delay the introduction of our products in international markets, prevent our customers with international operations from deploying our products throughout their global systems or, in some cases, prevent the export or import of our products to certain countries altogether. Any change in export or import regulations or related legislation, shift in approach to the enforcement or scope of existing regulations, or change in the countries, persons or technologies targeted by such regulations, could result in decreased use of our products by, or in our decreased ability to export or sell our products to, existing or potential international customers.

In addition, we may be subject to customs duties that could have a significant adverse impact on our operating results or, if we are able to pass on the related costs in any particular situation, would increase the cost of the related product to our customers. As a result, the future imposition of significant increases in the level of customs duties or the creation of import quotas on our products in Europe or in other jurisdictions, or any of the limitations on international sales described above, could have a material adverse effect on our business, operating results, financial condition and cash flows. Further, some of our customers in Europe have been, or are being, audited by local governmental authorities regarding the tariff classifications used for importation of our products. Import duties and tariffs vary by country and a different tariff classification for any of our products may result in higher duties or tariffs, which could have an adverse impact on our operating results and potentially increase the cost of the related products to our customers.

We may need additional capital in the future and may not be able to secure adequate funds on terms acceptable to us.

We have been engaged in the design, manufacture and sale of a variety of video products and system solutions since inception, which has required, and will continue to require, significant research and development expenditures.

We believe that our existing cash and short-term investments of approximately $153 million at December 31, 2015, even as it may be reduced through possible future repurchases of our common stock under the stock repurchase program discussed above, will satisfy our cash requirements for at least the next 12 months. However, we may need to raise additional funds to take advantage of presently unanticipated strategic opportunities, satisfy our other cash requirements from time to time, or strengthen our financial position. Our ability to raise funds may be adversely affected by a number of factors, including factors beyond our control, such as weakness in the economic conditions in markets in which we sell our products and continued

uncertainty in financial, capital and credit markets. There can be no assurance that equity or debt financing will be available to us on reasonable terms, if at all, when and if it is needed.

We may raise additional financing through public or private equity offerings, debt financings, or corporate partnership or licensing arrangements. To the extent we raise additional capital by issuing equity securities or convertible debt, our stockholders may experience dilution. To the extent that we raise additional funds through collaboration and licensing arrangements, it may be necessary to relinquish some rights to our technologies or products, or grant licenses on terms that are not favorable to us. To the extent we raise capital through debt financing arrangements, we may be required to pledge assets or enter into covenants that could restrict our operations or our ability to incur further indebtedness and the interest on such debt may adversely affect our operating results.

If adequate capital is not available, or is not available on reasonable terms, when needed, we may not be able to take advantage of acquisition or other market opportunities, to timely develop new products, or to otherwise respond to competitive pressures.

Our business and industry are subject to various laws and regulations that could adversely affect our business, operating results, cash flows and financial condition.

Our business and industry are regulated under various federal, state, local and international laws. For example, we are subject to environmental regulations such as the European Union's Waste Electrical and Electronic Equipment (WEEE) and Restriction on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) directives and similar legislation enacted in other jurisdictions worldwide. Our failure to comply with these laws could result in our being directly or indirectly liable for costs, fines or penalties and third-party claims, and could jeopardize our ability to conduct business in such regions and countries. We expect that our operations will be affected by other new environmental laws and regulations on an ongoing basis. Although we cannot predict the ultimate impact of any such new laws and regulations, they would likely result in additional costs, and could require that we redesign or change how we manufacture our products, any of which could have a material and adverse effect on our operating results, financial condition and cash flows.

We are subject to the Sarbanes-Oxley Act of 2002 which, among other things, requires an annual review and evaluation of our internal control over financial reporting. If we conclude in future periods that our internal control over financial reporting is not effective or if our independent registered public accounting firm is unable to provide an unqualified attestation as of future year-ends, we may incur substantial additional costs in an effort to correct such problems, and investors may lose confidence in our financial statements, and our stock price may decrease in the short term, until we correct such problems, and perhaps in the long term, as well.

We are subject to requirements under the Dodd-Frank Act of 2010 that require us to conduct research, disclose, and report whether or not our products contain certain conflict minerals sourced from the Democratic Republic of Congo or its surrounding countries. The implementation of these new requirements could adversely affect the sourcing, availability, and pricing of the materials used in the manufacture of components used in our products. In addition, we may incur certain additional costs to comply with the disclosure requirements, including costs related to conducting diligence procedures to determine the sources of conflict minerals that may be used or necessary to the production of our products and, if applicable, potential changes to products, processes or sources of supply as a consequence of such verification activities. It is also possible that we may face reputational harm if we determine that certain of our products contain minerals not determined to be conflict-free and/or we are unable to alter our products, processes or sources of supply to avoid such materials.

Changes in telecommunications legislation and regulations in the U.S. and other countries could affect our sales and the revenue we are able to derive from our products. In particular, "net neutrality" rules issued by the U.S. Federal Communications Commission (FCC) or regulations dealing with access by competitors to the networks of incumbent operators could slow or stop infrastructure and services investments or expansion by service providers. Increased regulation of our customers' pricing or service offerings could limit their investments and, consequently, revenue from our products. The impact of new or revised legislation or regulations could have a material adverse effect on our business, operating results, financial condition and cash flows.

Some anti-takeover provisions contained in our certificate of incorporation and bylaws, as well as provisions of Delaware law, could impair a takeover attempt.

We have provisions in our certificate of incorporation and bylaws that could have the effect of rendering more difficult or discouraging an acquisition deemed undesirable by our Board. These include provisions:

• authorizing blank check preferred stock, which could be issued with voting, liquidation, dividend and other rights superior to our common stock;

• limiting the liability of, and providing indemnification to, our directors and officers;

• limiting the ability of our stockholders to call, and bring business before, special meetings;

• requiring advance notice of stockholder proposals for business to be conducted at meetings of our stockholders and for nominations of candidates for election to our Board;

• controlling the procedures for conducting and scheduling of Board and stockholder meetings; and

• providing the Board with the express power to postpone previously scheduled annual meetings and to cancel previously scheduled special meetings.

These provisions could delay hostile takeovers, changes in control of the Company or changes in our management. As a Delaware corporation, we are also subject to provisions of Delaware law, including Section 203 of the Delaware General Corporation law, which prevents some stockholders holding more than 15% of our outstanding common stock from engaging in certain business combinations without approval of the holders of substantially all of our outstanding common stock. Any provision of our certificate of incorporation or bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

The conditional conversion feature of our convertible senior notes, if triggered, may adversely affect our financial condition and operating results.

In December 2015, we issued $128.25 million aggregate principal amount of 4.00% convertible senior notes due 2020 ("Notes") through private placement with a financial institution. The Notes bear interest at 4.00% per annum, which is payable semiannually in arrears on June 1 and December 1 of each year, commencing June 1, 2016. In the event the conditional conversion feature of the Notes is triggered, holders of the Notes will be entitled to convert the Notes at any time during specified periods at their option. If one or more holders elect to convert their Notes, unless we elect to satisfy our conversion obligation by delivering solely shares of our common stock (other than paying cash in lieu of delivering any fractional share), we would be required to settle a portion or all of our conversion obligation through the payment of cash, which could adversely affect our liquidity. In addition, even if holders do not elect to convert their Notes, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of the Notes as a current rather than long-term liability, which would result in a material reduction of our net working capital.

The accounting method for convertible debt securities that may be settled in cash, such as the Notes, could have a material effect on our reported financial results.

In May 2008, the Financial Accounting Standards Board, which we refer to as FASB, issued FASB Staff Position No. APB 14-1, Accounting for Convertible Debt Instruments That May Be Settled in Cash Upon Conversion (Including Partial Cash Settlement), which has subsequently been codified as Accounting Standards Codification 470-20, Debt with Conversion and Other Options, which we refer to as ASC 470-20. Under ASC 470-20, an entity must separately account for the liability and equity components of the convertible debt instruments (such as the Notes) that may be settled entirely or partially in cash upon conversion in a manner that reflects the issuer's economic interest cost. The effect of ASC 470-20 on the accounting for the Notes is that the equity component is required to be included in the additional paid-in capital section of stockholders' equity on our consolidated balance sheet, and the value of the equity component would be treated as debt discount for purposes of accounting for the debt component of the Notes. As a result, we will be required to record a greater amount of non-cash interest expense in current and future periods presented as a result of the amortization of the discounted carrying value of the Notes to their face amount over the term of the Notes. We will report lower net income in our financial results because ASC 470-20 will require interest to include both the current period's amortization of the debt discount and the instrument's non-convertible interest rate, which could adversely affect our reported or future financial results, the trading price of our common stock and the trading price of the Notes.

In addition, under certain circumstances, convertible debt instruments (such as the Notes) that may be settled entirely or partly in cash are currently accounted for utilizing the treasury stock method, the effect of which is that the shares issuable upon conversion of the Notes are not included in the calculation of diluted earnings per share except to the extent that the conversion

value of the Notes exceeds their principal amount. Under the treasury stock method, for diluted earnings per share purposes, the transaction is accounted for as if the number of shares of common stock that would be necessary to settle such excess, if we elected to settle such excess in shares, are issued. We cannot be sure that the accounting standards in the future will continue to permit the use of the treasury stock method or that circumstances would not change such that we would no longer be permitted to use the treasury stock method. If we are unable to use the treasury stock method in accounting for the shares issuable upon conversion of the Notes, then our diluted earnings per share would be adversely affected.

Our common stock price, and therefore the price of our Notes, may be extremely volatile, and the value of an investment in our stock may decline.

Our common stock price has been highly volatile. We expect that this volatility will continue in the future due to factors such as:

- general market and economic conditions;
- actual or anticipated variations in operating results;
- increases or decreases in the general stock market or to the stock prices of technology companies;
- announcements of technological innovations, new products or new services by us or by our competitors or customers;
- changes in financial estimates or recommendations by stock market analysts regarding us or our competitors;
- announcements by us or our competitors of significant acquisitions, dispositions, strategic partnerships, joint ventures or capital commitments;
- announcements by our customers regarding end user market conditions and the status of existing and future infrastructure network deployments;
- the repurchase of over 30% of our outstanding shares since 2012 pursuant to our ongoing stock repurchase program and the tender offer we completed in 2013, as well as any future repurchases under our stock repurchase program;
- additions or departures of key personnel; and
- future equity or debt offerings or our announcements of these offerings.

In addition, in recent years, the stock market in general, and the NASDAQ Stock Market and the securities of technology companies in particular, have experienced extreme price and volume fluctuations. These fluctuations have often been unrelated or disproportionate to the operating performance of individual companies. These broad market fluctuations have in the past, and may in the future, materially and adversely affect our stock price, regardless of our operating results. In these circumstances, investors may be unable to sell their shares of our common stock at or above their purchase price over the short term, or at all.

Our stock price may decline if additional shares are sold in the market or if analysts drop coverage of or downgrade our stock.

Future sales of substantial amounts of shares of our common stock by our existing stockholders in the public market, or the perception that these sales could occur, may cause the market price of our common stock to decline. In addition, we issue additional shares upon exercise of stock options, including under our Employee Stock Purchase Plan, and in connection with grants of restricted stock units on an ongoing basis. To the extent we do not elect to pay solely cash upon conversion of our Notes, we will also be required to issue additional shares of common stock upon conversion. Increased sales of our common stock in the market after exercise of outstanding stock options or grants of restricted stock units could exert downward pressure on our stock price. These sales also might make it more difficult for us to sell equity or equity-related securities in the future at a time and price we deem appropriate.

The trading market for our common stock relies in part on the availability of research and reports that third-party industry or securities analysts publish about us. If one or more of the analysts who do cover us downgrade our stock, our stock price may decline. If one or more of these analysts cease coverage of us, we could lose visibility in the market, which in turn could cause the liquidity of our stock and our stock price to decline.

Available Information

Harmonic makes available free of charge, on the Harmonic web site, the Company's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K (via link to the SEC website), and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after Harmonic files such material with, or furnishes such material to, the Securities and Exchange Commission. The address of the Harmonic web site is http://www.harmonicinc.com. Except as expressly set forth in this Form 10-K, the contents of our web site are not incorporated into, or otherwise to be regarded as part of, this report.

Item 1B. ***UNRESOLVED STAFF COMMENTS***

None.

Item 2. ***PROPERTIES***

All of our facilities are leased, including our principal operations and corporate headquarters in San Jose, California. We have research and development centers in the United States, Israel and Hong Kong. We have sales and service offices primarily in the U.S. and various locations in Europe and Asia. Our leases, which expire at various dates through November 2022, are for an aggregate of approximately 339,000 square feet of space. The San Jose lease has a term of ten years and is for approximately 188,000 square feet of space. The San Jose facility houses our research and development and corporate headquarters functions. We have two business segments: Video and Cable Edge. Because of the interrelation of these segments, a majority of these segments use substantially all of the properties, at least in part, and we retain the flexibility to use each of the properties in whole or in part for each of the segments. We believe that the facilities that we currently occupy are adequate for our current needs and that suitable additional space will be available, as needed, to accommodate the presently foreseeable expansion of our operations.

Item 3. ***LEGAL PROCEEDINGS***

From time to time, we are involved in lawsuits as well as subject to various legal proceedings, claims, threats of litigation, and investigations in the ordinary course of business, including claims of alleged infringement of third-party patents and other intellectual property rights, commercial, employment and other matters. Given the inherent uncertainties of litigation, the ultimate outcome of these matters cannot be predicted at this time.

In October 2011, Avid Technology, Inc. ("Avid") filed a complaint in the United States District Court for the District of Delaware alleging that Harmonic's Media Grid product infringes two patents held by Avid. A jury trial on this complaint commenced on January 23, 2014 and, on February 4, 2014, the jury returned a unanimous verdict in our favor, rejecting Avid's infringement allegations in their entirety. On May 23, 2014, Avid filed a post-trial motion asking the court to set aside the jury's verdict, and the judge issued an order on December 17, 2014, denying the motion. On January 5, 2015, Avid filed an appeal with respect to the jury's verdict with the Federal Circuit, which was docketed on January 9, 2015, as Case No. 2015-1246. Avid filed its opening brief with respect to this appeal on March 24, 2015, we filed our response brief on May 7, 2015, and Avid filed its reply brief on June 16, 2015. Oral arguments were held on December 11, 2015. On January 29, 2016, the Federal Circuit issued an order vacating the verdict of noninfringement and remanding the case to the trial court for a new trial on infringement. On February 26, 2016, Harmonic filed a request for rehearing and rehearing en banc at the Federal Circuit.

In June 2012, Avid served a subsequent complaint in the United States District Court for the District of Delaware alleging that Harmonic's Spectrum product infringes one patent held by Avid. The complaint seeks injunctive relief and unspecified damages. In September 2013, the U.S. Patent Trial and Appeal Board ("PTAB") authorized an inter partes review to be instituted as to claims 1-16 of the patent asserted in this second complaint. A hearing before the PTAB was conducted on May 20, 2014. On July 10, 2014, the PTAB issued a decision finding claims 1-10 invalid and claims 11-16 not invalid. We filed an appeal with respect to the PTAB's decision on claims 11-16 on September 11, 2014. The appeal was docketed with the Federal Circuit on October 22, 2014, as Case No. 2015-1072, and we filed our opening brief with respect to this appeal on January 29, 2015. Avid and PTAB each filed a response brief on April 27, 2015, and we filed a reply brief on May 28, 2015. Oral arguments were held on October 8, 2015. The Federal Circuit issued an order on March 1, 2016, affirming the PTAB's decision. The litigation is currently stayed.

An unfavorable outcome on any litigation matters could require us to pay substantial damages, or, in connection with any intellectual property infringement claims, could require us to pay ongoing royalty payments or could prevent us from selling certain of our products. As a result, a settlement of, or an unfavorable outcome on, any of the matters referenced above or other litigation matters could have a material adverse effect on our business, operating results, financial position and cash flows.

Our industry is characterized by the existence of a large number of patents and frequent claims and related litigation regarding patent and other intellectual property rights. From time to time, third parties have asserted, and may in the future assert, exclusive patent, copyright, trademark and other intellectual property rights against us or our customers. Such assertions arise in the normal course of our operations. The resolution of any such assertions and claims cannot be predicted with certainty.

Item 4. ***MINE SAFETY DISCLOSURE***

Not applicable.

PART II

Item 5. *MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES*

Market Information of our Common Stock

Our common stock is traded on the NASDAQ Global Select Market under the symbol HLIT, and has been listed on NASDAQ since our initial public offering on May 22, 1995. The following table sets forth, for the periods indicated, the high and low sales price per share of our common stock as reported on the NASDAQ Global Select Market:

	2015		2014	
	Sales Price		Sales Price	
Quarter ended	High	Low	High	Low
First quarter	$ 7.98	$ 6.53	$ 7.48	$ 5.93
Second quarter	7.64	6.55	7.75	6.35
Third quarter	7.09	5.40	7.66	5.66
Fourth quarter	6.31	4.07	7.46	5.61

Holders

As of February 29, 2016, there were approximately 402 holders of record of our common stock.

Dividend Policy

We have never declared or paid any dividends on our capital stock. At this time, we expect to retain future earnings, if any, for use in the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future. Our line of credit includes covenants prohibiting the payment of cash dividends.

Repurchases of Equity Securities by the Issuer

In April 2012, the Board approved a stock repurchase program that provided for the repurchase of up to $25 million of our outstanding common stock. Under the program, we are authorized to repurchase shares of common stock in open market transactions or pursuant to any trading plan that may be adopted in accordance with Rule 10b5-1 of the Exchange Act. From time to time, the Board may approve further increases to the program and the amount approved for this program was increased to $300 million periodically through May 2014 and the repurchase period was extended through the end of 2016. The timing and actual number of shares repurchased, if any, will depend on a variety of factors, including the price and availability of our shares, trading volume and general market conditions. The purchases are funded from available working capital. The program may be suspended or discontinued at any time without prior notice.

During the years ended December 31, 2015, 2014 and 2013, we repurchased from open market transactions 3.4 million, 13.9 million and 6.3 million shares of our common stock, respectively, at a total cost of $23.0 million, $93.1 million and $40.6 million, respectively, and at an average share price of $6.70, $6.70 and $6.48, respectively. In addition, $76.0 million, including $1.0 million of expenses, was spent in our "modified Dutch auction" tender offer, which closed on May 24, 2013. Under the tender offer, we repurchased 12.0 million shares of our common stock at $6.25 per share. The remaining authorized amount for repurchases under this program was $45.7 million as of December 31, 2015. The excess of cost over par value for the repurchase of the Company's common stock is recorded to additional paid-in-capital. Common stock repurchased under the program was recorded based upon the trade date for accounting purposes. All common shares repurchased under this program have been retired.

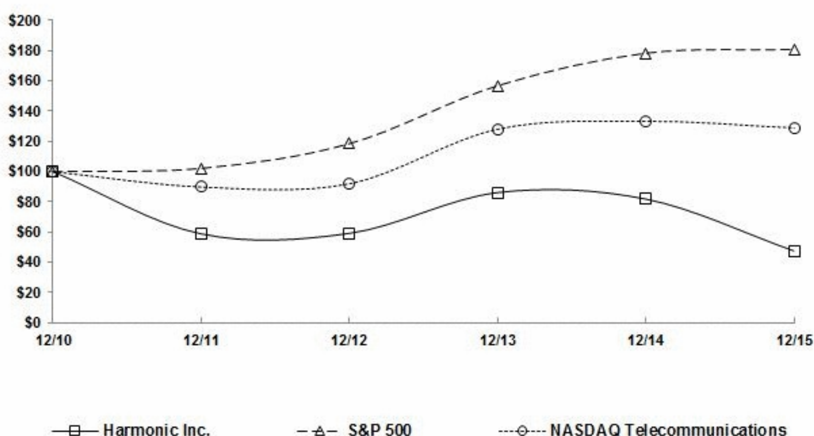
Additionally, on December 8 2015, the Board approved the use of part of the proceeds from the sale and issuance of our 4.00% convertible senior notes due 2020 ("the Notes" or "the offering", as applicable), issued on December 14, 2105, (see Note 12, "Convertible Notes and Credit Facilities" for additional information on the Notes) to repurchase shares of our common stock from purchasers of the Notes in privately negotiated transactions effected through the initial purchaser or its affiliate as our agent. Concurrent with the issuance of the Notes, we used $49.9 million of the net proceeds from the Notes to repurchase 11.1 million shares of our common stock at a price of $4.49 per share.

The following table is a summary of our stock repurchases during the quarter ended December 31, 2015 (in thousands, except per share data):

Period	Total Number of Shares Repurchased		Average Price Paid per Share	Total Number of Shares Repurchased as Part of Publicly Announced Plan or Program		Approximate Dollar Value of Shares that May Yet be Purchased Under the Plan or Program
October 3, 2015 - October 30, 2015	400	$	5.96	400	$	46,261
October 31, 2015 - November 27, 2015	100	$	5.88	100	$	45,673
November 28, 2015 - December 31, 2015	—			—	$	45,673
	500	$	5.95	500		

Stock Performance Graph

Set forth below is a line graph comparing the annual percentage change in the cumulative return to the stockholders of the Company's common stock with the cumulative return of the NASDAQ Telecommunications Index and of the Standard & Poor's (S&P) 500 Index for the period commencing December 31, 2010 and ending on December 31, 2015. The graph assumes that $100 was invested in each of the Company's common stock, the S&P 500 and the NASDAQ Telecommunications Index on December 31, 2010, and assumes the reinvestment of dividends, if any. The comparisons shown in the graph below are based upon historical data. Harmonic cautions that the stock price performance shown in the graph below is not indicative of, nor intended to forecast, the potential future performance of the Company's common stock.



	12/10	12/11	12/12	12/13	12/14	12/15
Harmonic Inc.	100.00	58.81	59.16	86.11	81.80	47.49
S&P 500	100.00	102.11	118.45	156.82	178.29	180.75
NASDAQ Telecom	100.00	89.84	91.94	128.06	133.34	128.91

The information contained in this Stock Performance Graph section shall not be deemed to be "soliciting material", "filed" or incorporated by reference in previous or future filings with the SEC, or subject to the liabilities of Section 18 of the Securities Exchange Act of 1934, except to the extent that Harmonic specifically incorporates it by reference into a document filed under the Securities Act of 1933 or the Securities Exchange Act of 1934.

Item 6. ***SELECTED FINANCIAL DATA***

The selected financial data set forth below as of December 31, 2015 and 2014, and for the fiscal years ended December 31, 2015, 2014 and 2013, are derived from our Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K. The selected financial data as of December 31, 2013, 2012 and 2011, and for the fiscal years ended December 31, 2012 and 2011 are derived from audited financial statements not included in this Annual Report on Form 10-K. This financial data should be read in conjunction with Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, and the Consolidated Financial Statements and related notes included elsewhere in this Annual Report on Form 10-K. These historical results are not necessarily indicative of the results to be expected in the future.

On March 5, 2013, we completed the sale of our cable access HFC business to Aurora Networks. As such, the results of operations associated with cable access HFC business are presented as discontinued operations in our Consolidated Statements of Operations for all periods presented.

	Year ended December 31,				
	2015	2014	2013	2012	2011
	(In thousands, except per share amounts)				
Consolidated Statements of Operations Data					
Net revenue	$ 377,027	$ 433,557	$ 461,940	$ 476,871	$ 490,874
Cost of revenue [1]	174,315	221,209	241,495	256,339	254,058
Gross profit[2]	202,712	212,348	220,445	220,532	236,816
Operating expenses:					
Research and development	87,545	93,061	99,938	102,627	99,314
Selling, general and administrative	120,960	131,322	134,014	127,117	127,077
Amortization of intangibles	5,783	6,775	8,096	8,705	8,918
Restructuring and asset impairment charges [1]	1,372	2,761	1,421	—	—
Total operating expenses	215,660	233,919	243,469	238,449	235,309
Income (loss) from operations	(12,948)	(21,571)	(23,024)	(17,917)	1,507
Interest income (expense), net [7]	(333)	132	219	515	374
Other expense, net	(282)	(356)	(347)	(293)	(514)
Loss on impairment of long-term investment [3]	(2,505)	—	—	—	—
Income (loss) from continuing operations before income taxes	(16,068)	(21,795)	(23,152)	(17,695)	1,367
Provision for (benefit from) income taxes [4][5]	(407)	24,453	(44,741)	(1,506)	(651)
Income (loss) from continuing operations [6]	$ (15,661)	$ (46,248)	$ 21,589	$ (16,189)	$ 2,018
Net income (loss) per share from continuing operations:					
Basic	$ (0.18)	$ (0.50)	$ 0.20	$ (0.14)	$ 0.02
Diluted	$ (0.18)	$ (0.50)	$ 0.20	$ (0.14)	$ 0.02
Shares used in per share calculation:					
Basic	87,514	92,508	106,529	116,457	115,175
Diluted	87,514	92,508	107,808	116,457	116,427

	As of December 31,				
	2015	2014	2013	2012	2011
	(In thousands)				
Consolidated Balance Sheet Data					
Cash, cash equivalents and short-term investments	$ 152,794	$ 104,879	$ 170,581	$ 201,176	$ 161,837
Working capital	$ 201,250	$ 142,754	$ 243,650	$ 293,978	$ 279,060
Total assets	$ 524,957	$ 480,518	$ 606,084	$ 717,531	$ 734,166
Convertible debt, long-term[7]	$ 98,295	$ —	$ —	$ —	$ —
Stockholders' equity	$ 328,168	$ 371,813	$ 494,166	$ 553,413	$ 564,316

____

(1) Starting 2013, we implemented a series of restructuring activities. In 2015, the restructuring and related charges were $1.5 million, of which $1.4 million is included in operating expenses and $0.1 million is included in cost of revenue. In 2014, the restructuring and impairment charges were $3.1 million, of which $2.8 million is included in operating expenses and $0.3 million was included in cost of revenue. In 2013, the restructuring charges were $2.2 million, of which $1.4 million is included in operating expenses and $0.8 million is included in cost of revenue (See Note 11, “Restructuring and Asset Impairment Charges,” of the notes to our Consolidated Financial Statements for detail information).

(2) Gross margin increased to 53.8% in 2015 compared to 49.0% in 2014. The increase in gross margin was primarily due to decreased expenses related to amortization, operational efficiencies and product mix shifts in our product portfolio. The expense related to amortization of intangibles included in cost of revenue decreased from $13.7 million in 2014 to $0.7 million in 2015, due to majority of the purchased tangible assets becoming fully amortized.

(3) In 2015, we recorded an impairment charge of $2.5 million for our investment in VJU iTV Development GmbH (“VJU”) as a result of our assessment that this investment was impaired on an other-than-temporary basis (See Note 5, “Investments in Other Equity Securities,” of the notes to our Consolidated Financial Statements for additional information).

(4) In 2014, we recorded a net increase in valuation allowance of $29.0 million in 2014 against U.S. net deferred tax assets. A history of operating losses in recent years has led to uncertainty with respect to our ability to realize certain of our net deferred tax assets. This unfavorable impact was partially offset by the release of $9.0 million of tax reserves in 2014, including accrued interests and penalties, for our 2010 tax year in the United States, as a result of the expiration of the statute of limitation for that tax year.

(5) In 2013, we released $39.0 million of tax reserves, including accrued interests and penalties, for our 2008 and 2009 tax years in the United States, as a result of the expiration of the statute of limitations for those tax years.

(6) Income (loss) from continuing operations for 2015, 2014, 2013, 2012 and 2011 included stock-based compensation expense of $15.6 million, $17.3 million, $16.0 million, $18.4 million and $20.3 million, respectively.

(7) In December 2015, we issued $128.25 million aggregate principal amount of convertible senior notes due December 2020 (“the Notes”) through a private placement with a financial institution. The Notes bear interest at 4.00% per annum, which is payable semiannually in arrears on June 1 and December 1 of each year, commencing June 1, 2016. In accordance with accounting guidance on embedded conversion features, we valued and bifurcated the conversion option associated with the Notes recording $26.9 million in stockholders’ equity. We incurred approximately $4.1 million of debt issuance costs in connection with the issuance of the Notes, which we recorded as a deduction to the carrying amount of the Notes and $0.8 million of debt issuance costs was allocated to stockholders’ equity. The resulting net debt discount, difference between the principal amount of the Notes and the carrying value of the Notes, of $30.2 million is amortized to interest expenses at an effective interest rate of 9.94% over the contractual term of the Notes. In 2015, we recorded $240,000 of coupon interest expense and $216,000 of interest expenses related to the amortization of debt discount. (See Note 12, “Convertible Notes and Credit Facility,” of the notes to our Consolidated Financial Statements for additional information on the Notes).

Item 7. ***MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS***

The following discussion should be read in conjunction with the consolidated financial statements and the related notes. The following discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include, but are not limited to, those discussed below and those listed under Item 1A, Risks Factors.

Business Overview

At Harmonic, we design, manufacture and sell versatile and high performance video infrastructure products and system solutions that enable our customers to efficiently create, prepare and deliver a full range of video and broadband services to consumer devices, including televisions, personal computers, laptops, tablets and smart phones.

We do business in three geographic regions: Americas, EMEA, and APAC. Prior to the fourth quarter of 2014, we operated our business in one reportable segment and starting in the fourth quarter of 2014, we changed our operating segments to align with our internal structure. The new reporting structure consists of two operating segments: Video and Cable Edge. Our Video business sells video processing and production and playout solutions and services worldwide to cable operators and satellite and telecommunications (telco) Pay-TV service providers, which we refer to collectively as "service providers," as well as to broadcast and media companies, including streaming new media companies. Our Cable Edge business sells cable edge solutions and related services, primarily to cable operators globally. We believe these changes provide investors with increased financial reporting transparency and enable better insight into the market and performance trends driving our business.

Historically, our revenue has been dependent upon capital spending in the cable, satellite, telco, broadcast and media industries, including streaming media. Our customers' capital spending patterns are dependent on a variety of factors, including but not limited to: economic conditions in the U.S. and international markets; access to financing; annual budget cycles of each of the industries we serve; impact of industry consolidations; and customers suspending or reducing capital spending in anticipation of new products or new standards, new industry trends and/or technology shifts. If our product portfolio and product development plans do not position us well to capture an increased portion of the capital spending in the markets on which we compete, our revenue may decline. As we attempt to further diversify our customer base in these markets, we may need to continue to build alliances with other equipment manufacturers, content providers, resellers and system integrators, managed services providers and software developers; adapt our products for new applications; take orders at prices resulting in lower margins; and build internal expertise to handle the particular operational, payment, financing and/or contractual demands of our customers, which could result in higher operating costs for us. Implementation issues with our products or those of other vendors have caused in the past, and may cause in the future, delays in project completion for our customers and delay our recognition of revenue.

A majority of our revenue has been derived from relatively few customers, due in part to the consolidation of our service provider customers. Sales to our ten largest customers in 2015, 2014 and 2013 accounted for approximately 32%, 35% and 31% of our revenue, respectively. Although we are attempting to broaden our customer base by penetrating new markets and further expanding internationally, we expect to see continuing industry consolidation and customer concentration. During 2015, 2014 and 2013, revenue from Comcast accounted for 12%, 16% and 12%, of our revenue, respectively. The loss of Comcast or any other significant customer, any material reduction in orders by Comcast or any significant customer, or our failure to qualify our new products with a significant customer could materially and adversely affect our operating results, financial condition and cash flows.

Our 2015 revenue was affected by several external factors hampering our customers' demand. Among these factors was service provider consolidation impacting several of our historical top ten customers in 2015. We also continue to experience currency-driven delays, particularly in parts of Asia, Europe, Latin America and the Middle East. And across geographies, we continue to work with both service provider and media customers who are making buying decisions much more slowly than they have historically as they grapple with several significant business and technology transitions such as the emerging over-the-top and data center strategies. Primarily as a result of the confluence of these factors our net revenue decreased 13% from $434 million in 2014 to $377 million in 2015. The strengthening of the U.S. dollar negatively impacted our revenue from EMEA in 2015, while the customer consolidations negatively impacted our revenues from all regions in 2015, but primarily the Americas region.

Our Video product revenue declined in both 2015 and 2014, primarily due to our customers' longer buying cycle as they have been, and continue to be cautious investing in new technologies, such as next-generation IP architecture, Ultra HD and 4K. We believe a material and growing portion of the opportunities in our video business pipeline are linked to a migration to

IP workflows and the distribution of linear and on-demand, over-the-top, new skinny bundle, and new mobile video services and we are committed to continue our market leadership in this business. We are steadily transitioning our video business to be more software-centric, with converged traditional pay-TV and over-the-top services playing an increasingly central role. Our VOS platform, which is enabling video compression delivered to our customers as software, is gaining market momentum, and was the key to several competitive IPTV and over-the-top wins in the fourth quarter of 2015. We anticipate the ongoing video business transition to software will likely compress top-line growth in the video business, but will expand gross margins and operating profit. In addition, our market position, technology differentiation and financial performance will all be enhanced through the Thomson Video Networks (“TVN”) acquisition.

On December 7, 2015, we signed a binding offer, in the form of a “put” option agreement, to acquire TVN.

Our Cable Edge strategy is primarily to become a major player in the approximately $2 billion CCAP market by delivering innovative new DOCSIS 3.1 CMTS technology, that we call CableOS. Our Cable Edge segment, after a successful launch, in 2014 saw an unexpected decline stemming from the unexpectedly strong spending pullback associated with a handful of consolidations in the cable industry and from a slackening of demand as some of our customers are still preparing to make new investments in the converged data and video DOCSIS 3.1 CCAP market. While these trends present challenges for us, we believe we have made some significant progress on DOCSIS 3.1 CMTS technology. During the fourth quarter of 2015, we met our internal development milestones and successfully demonstrated full DOCSIS 3.1 interoperability at one of our major customer’s site. In addition, we received our first multi-million-dollar financial commitment from a Tier 1 international operator. We remain firmly committed to our business strategy and we believe we are on track to make our first CableOS shipments in the second half of 2016. Meanwhile, we expect 2016 global demand for our legacy EdgeQAM technology to be similar to the depressed level that we saw in the back half of 2015.

As a result of the decreases in our net revenue in 2015 and 2014, we implemented a series of restructuring plans to bring our operating expenses more in line with net revenues, while simultaneously implementing extensive, company-wide expense control programs (See Note 11, “Restructuring and Asset Impairment Charges,” of the notes to our Consolidated Financial Statements for additional information).

We ended the year with $152.8 million in cash, cash equivalents and short-term investments, including the net proceeds of approximately $124.7 million from the sale and issuance of convertible notes, which we completed on December 14, 2015 in a private placement (“the Notes”). During 2015, we generated $6.4 million cash from operations, used $72.9 million to repurchase our common stock and completed the issuance of the Notes. (See Note 12, “Convertible Notes and Credit Facilities,” of the notes to our Consolidated Financial Statements for additional information on the Notes).

In December 2015, we issued $128.25 million aggregate principal amount of the Notes maturing December 2020. The Notes bear interest at a fixed rate of 4.00% per year, payable semiannually in arrears on June 1 and December 1 of each year, beginning on June 1, 2016. Concurrent with the issuance of the Notes, we used $49.9 million of the net proceeds from the Notes to repurchase 11.1 million shares of our common stock. The remaining net proceeds of the Notes were used to fund the TVN acquisition, which was completed on February 29, 2016.

We expect that our current sources of liquidity together with our current projections of cash flow from operating activities will provide us adequate liquidity based on our current plans.

Recent Developments

On February 11, 2016, pursuant to the terms of the Put Option Agreement, one of our subsidiaries entered into a securities purchase agreement (the “SPA”) with TVN’s shareholders (the “Sellers”) to purchase 100% of the share capital and voting rights of TVN, on a non-diluted basis. On February 29, 2016, we completed the acquisition of TVN for total cash consideration of approximately $76.5 million. There may be additional post-closing payments in amounts respectively capped to (i) the difference between €76 million (as converted from euros into U.S. dollars) and $75 million, with respect to an adjustment based on TVN’s 2015 revenue, and (ii) $5 million with respect to an adjustment based on TVN’s 2015 backlog that ships during the first half of 2016, all of which at such times and under the circumstances set forth in the SPA.

Critical Accounting Policies, Judgments and Estimates

The preparation of financial statements and related disclosures requires Harmonic to make judgments, assumptions and estimates that affect the reported amounts of assets and liabilities, the disclosure of contingencies and the reported amounts of revenue and expenses in the financial statements and accompanying notes. Material differences may result in the amount and timing of revenue and expenses if different judgments or different estimates were made. See Note 2 of the notes to our Consolidated Financial Statements for details of our accounting policies. Critical accounting policies, judgments and estimates that we believe have the most significant impact on Harmonic’s financial statements are set forth below:

- Revenue recognition;
- Valuation of inventories;
- Impairment of goodwill or long-lived assets;
- Assessment of the probability of the outcome of current litigation;
- Accounting for income taxes; and
- Stock-based compensation.

Revenue Recognition

Harmonic's principal sources of revenue are from the sale of hardware, software, hardware and software maintenance contracts, and the sale of end-to-end solutions, encompassing design, manufacture, test, integration and installation of products. Harmonic recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been provided, the sale price is fixed or determinable, and collectability is reasonably assured.

We generally use contracts and customer purchase orders to determine the existence of an arrangement. Shipping documents and customer acceptance, when applicable, are used to verify delivery. We assess whether the sales price is fixed or determinable based on the payment terms associated with the transaction and whether the price is subject to refund or adjustment. We assess collectability based primarily on the creditworthiness of the customer, as determined by credit checks and analysis, as well as the customer's payment history.

Significant management judgments and estimates must be made in connection with determination of the revenue to be recognized in any accounting period. Because of the concentrated nature of our customer base, different judgments or estimates made for any one large contract or customer could result in material differences in the amount and timing of revenue recognized in any particular period.

We have multiple-element revenue arrangements that include hardware and software essential to the hardware product's functionality, non-essential software, services and support. We allocate revenue to all deliverables based on their relative selling prices. We determine the relative selling prices by first considering vendor-specific objective evidence of fair value ("VSOE"), if it exists; otherwise third-party evidence ("TPE") of the selling price is used. When we are unable to establish selling price using VSOE or TPE, we use our best estimate of selling price ("BESP") in our allocation of arrangement consideration. The objective of BESP is to determine the price at which we would transact a sale if the product or service were sold on a stand-alone basis. BESP is generally used for offerings that are not typically sold on a stand-alone basis or for new or highly customized offerings. The Company's process for determining BESP involves management's judgment, and considers multiple factors that may vary over time, depending upon the unique facts and circumstances related to each deliverable. If the facts and circumstances underlying the factors considered change or should future facts and circumstances lead the Company to consider additional factors, the Company's BESP may also change. Once revenue is allocated to all deliverables based on their relative selling prices, revenue related to hardware elements (hardware, essential software and related services) are recognized using a relative selling price allocation and non-essential software and related services are recognized under the residual method.

Sales of stand-alone software that are not considered essential to the functionality of the hardware continue to be subject to the software revenue recognition guidance. In accordance with the software revenue recognition guidance, the Company applies the residual method to recognize revenue for the delivered elements in stand-alone software transactions. Under the residual method, the amount of revenue allocated to delivered elements equals the total arrangement consideration, less the aggregate fair value of any undelivered elements, typically maintenance, provided that VSOE of fair value exists for all undelivered elements. We establish fair value by reference to the price the customer is required to pay when an item is sold separately, using contractually stated, substantive renewal rates, when applicable, or the price of recently completed stand alone sales transactions. Accordingly, the determination as to whether appropriate objective and reliable evidence of fair value exists can impact the timing of revenue recognition for an arrangement.

Solution sales for the design, manufacture, test, integration and installation of products are accounted for in accordance with applicable guidance on accounting for performance of construction/production contracts, using the percentage-of-completion method of accounting when various requirements for the use of this accounting guidance exist. Under the percentage-of-completion method, our revenue recognized reflects the portion of the anticipated contract revenue that has been earned, equal to the ratio of actual labor hours expended to total estimated labor hours to complete the project. Costs are recognized proportionally to the labor hours incurred. Management believes that, for each such project, labor hours expended in proportion to total estimated hours at completion represents the most reliable and meaningful measure for determining a project's progress toward completion. This requires us to estimate, at the outset of each project, a detailed project plan and

associated labor hour estimates for that project. For contracts that include customized services for which labor costs are not reasonably estimable, the Company uses the completed contract method of accounting. Under the completed contract method, 100% of the contract's revenue and cost is recognized upon the completion of all services under the contract. If the estimated costs to complete a project exceed the total contract amount, indicating a loss, the entire anticipated loss is recognized. Our application of the percentage-of-completion method of accounting is subject to our estimates of labor hours to complete each project. In the event that actual results differ from these estimates or we adjust these estimates in future periods, our operating results, financial position or cash flows for a particular period could be adversely affected.

Revenue on shipments to resellers and systems integrators is generally recognized on delivery. Allowances are provided for estimated returns and such allowances are adjusted periodically to reflect actual and anticipated experience. Resellers and systems integrators purchase our products for specific capital equipment projects of the end-user and do not hold inventory. They perform functions that include importation, delivery to the end-customer, installation or integration, and post-sales service and support. Our agreements with these resellers and systems integrators have terms which are generally consistent with the standard terms and conditions for the sale of our equipment to end users and do not provide for product rotation or pricing allowances, as are typically found in agreements with stocking resellers. We have long-term relationships with most of these resellers and systems integrators and substantial experience with similar sales of similar products. We do have instances of accepting product returns from resellers and system integrators. However, such returns typically occur in instances where the system integrator has designed a product into a project for the end user, but the integrator requests permission to return the component as it does not meet the specific project's functional requirements. Such returns are made solely at our discretion, as our agreements with resellers and system integrators do not provide for return rights. We have extensive experience monitoring product returns from our resellers, and, accordingly, we have concluded that the amount of future returns can be reasonably estimated in accordance with applicable accounting guidance. If the actual future returns were to deviate from the historical data on which the reserve had been established, our revenue could be adversely affected.

Valuation of Inventories

We state inventories at the lower of cost or market. Cost is computed using standard cost, which approximates actual cost, on a first-in, first-out basis. We write down the cost of excess or obsolete inventory to net realizable value based on future demand forecasts and historical consumption. If there were to be a sudden and significant decrease in demand for our products, or if there were a higher incidence of inventory obsolescence because of rapidly changing technology and customer requirements, we could be required to record additional charges for excess and obsolete inventory and our gross margin could be adversely affected. Inventory management is of critical importance in order to balance the need to maintain strategic inventory levels to ensure competitive lead times against the risk of inventory obsolescence because of rapidly changing technology and customer requirements.

Impairment of Goodwill or Long-lived Assets

Goodwill represents the difference between the purchase price and the estimated fair value of the identifiable assets acquired and liabilities assumed. We test for goodwill impairment at the reporting unit level, which is the same as our operating segment, on an annual basis in the fourth quarter of each of our fiscal years, and at any other time at which events occur or circumstances indicate that the carrying amount of goodwill may exceed its fair value.

The provisions of the accounting standard for goodwill and other intangibles allows us to first assess qualitative factors to determine whether it is necessary to perform the two-step quantitative goodwill impairment test. Various factors are considered in the qualitative assessment, including macroeconomic conditions, financial performance, or a sustained decrease in share price. If as a result of the qualitative assessment, it is deemed more likely than not that the fair value of a reporting unit is less than its carrying amount, management will perform the quantitative test.

We use a two-step process to determine the amount of goodwill impairment. The first step requires comparing the fair value of the reporting unit to its net book value, including goodwill. A potential impairment exists if the fair value of the reporting unit is lower than its net book value. The second step of the process, which is performed only if a potential impairment exists, involves determining the difference between the fair value of the reporting unit's net assets other than goodwill and the fair value of the reporting unit. If this difference is less than the net book value of goodwill, an impairment exists and is recorded.

In the first step, the fair value of each of our reporting units is determined using both the income and market valuation approaches. Under the income approach, the fair value of the reporting unit is based on the present value of estimated future cash flows that the reporting unit is expected to generate over its remaining life. Under the market approach, the value of the reporting unit is based on an analysis that compares the value of the reporting unit to values of publicly-traded companies in similar lines of business. In the application of the income and market valuation approaches, we are required to make estimates of future operating trends and judgments on discount rates and other variables. Determining the fair value of a reporting unit is

highly judgmental in nature and involves the use of significant estimates and assumptions. We base our fair value estimates on assumptions we believe to be reasonable but that are unpredictable and inherently uncertain. Actual future results related to assumed variables could differ from these estimates. In addition, we make certain judgments and assumptions in allocating shared assets and liabilities to determine the carrying values for each of our reporting units.

Under the income approach, we calculate the fair value of a reporting unit based on the present value of estimated future cash flows. Cash flow projections are based on management's estimates of revenue growth rates and operating margins, taking into consideration industry and market conditions. The discount rate used is based on the weighted-average cost of capital adjusted for the relevant risk associated with business-specific characteristics and the uncertainty related to the business's ability to execute on the projected cash flows. Under the market approach, we estimate the fair value based on market multiples of revenue and earnings derived from comparable publicly-traded companies with similar operating and investment characteristics as the reporting units, and then apply a control premium which is determined by considering control premiums offered as part of the acquisitions that have occurred in market segments that are comparable with our reporting units.

During the fourth quarter of 2015, we performed the first step of goodwill impairment testing for our two reporting units and concluded that goodwill was not impaired as the Video and Cable Edge reporting units had estimated fair values in excess of their carrying value by approximately 87% and 42%, respectively. We have not recorded any impairment charges related to goodwill for any prior periods. Because the Cable Edge reporting unit has an estimated fair value that is not substantially in excess of its carrying value, we will continue to monitor this reporting unit for risk of impairment in future periods.

Our market capitalization has declined so far in 2016. A significant decline in a company’s stock price may suggest that an adverse change in the business climate may have caused the fair value of one or more reporting units to fall below their carrying value. Significant judgment has been applied to determine whether stock price declines are a short-term swing or a long-term trend. We believe that the decline in our stock price will not be sustained as it only fluctuated below the 2015 level for a short period. Additionally, we believe that the fluctuation in market capitalization was driven by general market movement and not company specific factors. We believe that the fair value established during the 2015 annual goodwill impairment testing for its Video and Cable Edge reporting units were reasonable and no triggering event subsequent to the 2015 annual assessment exists. However, a sustained decline in our stock price may lead to a triggering event for goodwill impairment in 2016.

We evaluate the recoverability of intangible assets and other long-lived assets when indicators of impairment are present. When impairment indicators are present, we evaluate the recoverability of intangible assets and other long-lived assets on the basis of undiscounted cash flows expected to result from the use of each asset group and its eventual disposition. If the undiscounted expected future cash flows are less than the carrying amount of the asset, an impairment loss is recognized in order to writedown the carrying value of the asset to its estimated fair market value.

In connection with restructuring actions initiated during 2014, we recorded an impairment charge of $1.1 million in fiscal 2014 related to software development costs incurred for a discontinued IT project. In 2015, we recorded an impairment charge of $2.5 million for our investment in VJU as we determined that the entire investment in VJU was impaired on an other-than-temporary basis. Factors considered included the severity of the impairment, expected cash flows and recent events specific to VJU. We have not recorded any other significant impairment charges related to intangible assets or long-lived assets for any prior periods (See Note 5, “Investments in Other Equity Securities,” of the notes to our Consolidated Financial Statements for additional information of VJU investment).

Assessment of the Probability of the outcome of Current Litigation

From time to time, we are involved in lawsuits as well as subject to various legal proceedings, claims, threats of litigation, and investigations in the ordinary course of business, including claims of alleged infringement of third-party patents and other intellectual property rights, commercial, employment and other matters. We assess potential liabilities in connection with each lawsuit and threatened lawsuits and accrue an estimated loss for these loss contingencies if both of the following conditions are met: information available prior to issuance of the financial statements indicates that it is probable that a liability has been incurred at the date of the financial statements and the amount of loss can be reasonably estimated. While certain matters to which we are a party specify the damages claimed, such claims may not represent reasonably probable losses. Given the inherent uncertainties of litigation, the ultimate outcome of these matters cannot be predicted at this time, nor can the amount of possible loss or range of loss, if any, be reasonably estimated.

In October 2011, Avid Technology, Inc. (“Avid”) filed a complaint in the United States District Court for the District of Delaware alleging that Harmonic’s Media Grid product infringes two patents held by Avid. A jury trial on this complaint commenced on January 23, 2014 and, on February 4, 2014, the jury returned a unanimous verdict in our favor, rejecting Avid’s infringement allegations in their entirety. On May 23, 2014, Avid filed a post-trial motion asking the court to set aside the jury’s verdict, and the judge issued an order on December 17, 2014, denying the motion. On January 5, 2015, Avid filed an appeal

with respect to the jury's verdict with the Federal Circuit, which was docketed on January 9, 2015, as Case No. 2015-1246. Avid filed its opening brief with respect to this appeal on March 24, 2015, we filed our response brief on May 7, 2015, and Avid filed its reply brief on June 16, 2015. Oral arguments were held on December 11, 2015. On January 29, 2016, the Federal Circuit issued an order vacating the verdict of noninfringement and remanding the case to the trial court for a new trial on infringement. On February 26, 2016, Harmonic filed a request for rehearing and rehearing en banc at the Federal Circuit.

In June 2012, Avid served a subsequent complaint in the United States District Court for the District of Delaware alleging that Harmonic's Spectrum product infringes one patent held by Avid. The complaint seeks injunctive relief and unspecified damages. On September 25, 2013, the U.S. Patent Trial and Appeal Board ("PTAB") authorized an inter partes review to be instituted as to claims 1-16 of the patent asserted in this second complaint. A hearing before the PTAB was conducted on May 20, 2014. On July 10, 2014, the PTAB issued a decision finding claims 1 - 10 invalid and claims 11 - 16 not invalid. We filed an appeal with respect to the PTAB's decision on claims 11 - 16, on September 11, 2014. The appeal was docketed with the Federal Circuit on October 22, 2014, as Case No. 2015-1072, and we filed our opening brief with respect to this appeal on January 29, 2015. Avid and PTAB each filed a response brief on April 27, 2015, and we filed a reply brief on May 28, 2015. Oral arguments were held on October 8, 2015. The Federal Circuit issued an order on March 1, 2016, affirming the PTAB's decision. The litigation is currently stayed.

An unfavorable outcome on any litigation matters could require us to pay substantial damages, or, in connection with any intellectual property infringement claims, could require us to pay ongoing royalty payments or could prevent us from selling certain of our products. As a result, a settlement of, or an unfavorable outcome on, any of the matters referenced above or other litigation matters could have a material adverse effect on our business, operating results, financial position and cash flows.

Accounting for Income Taxes

In preparing our financial statements, we estimate our income taxes for each of the jurisdictions in which we operate. This involves estimating our actual current tax exposures and assessing temporary differences resulting from differing treatment of items, such as reserves and accruals, for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within our Consolidated Balance Sheet.

Significant management judgment is required in determining our provision for income taxes, our deferred tax assets and liabilities and our future taxable income for purposes of assessing our ability to realize any future benefit from our deferred tax assets. A history of operating losses in recent years has led to uncertainty with respect to our ability to realize certain of our net deferred tax assets, and as a result we applied our full valuation allowance against our U.S. net deferred tax assets as of December 31, 2015. In the event that actual results differ from these estimates or we adjust these estimates in future periods, our operating results and financial position could be materially affected.

We are subject to examination of our income tax returns by various tax authorities on a periodic basis. We regularly assess the likelihood of adverse outcomes resulting from such examinations to determine the adequacy of our provision for income taxes. We apply the provisions of the applicable accounting guidance regarding accounting for uncertainty in income taxes, which requires application of a more-likely-than-not threshold to the recognition and derecognition of uncertain tax positions. If the recognition threshold is met, the applicable accounting guidance permits us to recognize a tax benefit measured at the largest amount of such tax benefit that, in our judgment, is more than fifty percent likely to be realized upon settlement. It further requires that a change in judgment related to the expected ultimate resolution of uncertain tax positions be recognized in earnings in the period in which such determination is made.

We file U.S. federal, state, and foreign income tax returns in jurisdictions with varying statutes of limitations during which such tax returns may be audited and adjusted by the relevant tax authorities. The U.S. Internal Revenue Service has concluded its audit for our 2008, 2009 and 2010 tax years. The statute of limitations on our 2008 and 2009, and 2010 and 2011 corporate income tax returns expired in September of 2013, 2014 and 2015, respectively. As a result, we released $39.0 million of related tax reserves, including accrued interests and penalties, for the 2008 and 2009 tax years in 2013. Additionally, we released $9.0 million and $0.5 million of related tax reserves, including accrued interests and penalties, for the 2010 and 2011 tax years in 2014 and 2015, respectively.

The 2012 through 2015 tax years generally remain subject to examination by U.S. federal and most state tax authorities. In significant foreign jurisdictions, the 2007 through 2015 tax years generally remain subject to examination by their respective tax authorities. We are currently under examination by the U.S. Internal Revenue Service for our 2012 federal income tax return, which commenced officially in August 2015, and so far there has been no proposed adjustment received for the audit. In addition, one of our subsidiaries is under audit for the 2012 and 2013 tax years, which commenced in the first quarter of 2015, by the Israel tax authority. If, upon the conclusion of these audits, the ultimate determination of taxes owed in the United States or Israel is for an amount in excess of the tax provision the Company has recorded in the applicable period, the Company's

overall tax expense, effective tax rate, operating results and cash flow could be materially and adversely impacted in the period of adjustment.

On July 27, 2015, the U.S. Tax Court issued an opinion in Altera Corp. v. Commissioner related to the treatment of stock-based compensation expense in an intercompany cost-sharing arrangement. A final decision was entered by the U.S. Tax Court on December 1, 2015. On February 19, 2016, the U.S. Internal Revenue Service filed a notice of appeal in *Altera Corp. v. Commissioner*, 145 T.C. No. 3 (2015), to the Ninth Circuit Court of Appeal. The Ninth Circuit will decide whether a regulation that mandates that stock-based compensation costs related to the intangible development activity of a qualified cost sharing arrangement (QCSA) must be included in the joint cost pool of the QCSA (the "all costs rule") is consistent with the arm's length standard as enunciated under section 482. We concluded that no adjustment to the consolidated financial statements as of December 31, 2015 is appropriate at this time due to the uncertainties with respect to the ultimate resolution of this case.

We file annual income tax returns in multiple taxing jurisdictions around the world. A number of years may elapse before an uncertain tax position is audited and finally resolved. While it is often difficult to predict the final outcome or the timing of resolution of any particular uncertain tax position, we believe that our reserves for income taxes reflect the most likely outcome. We adjust these reserves, as well as the related interest and penalties, in light of changing facts and circumstances. If our estimate of tax liabilities proves to be less than the ultimate assessment, a further charge to expense would result. If payment of these amounts ultimately proves to be unnecessary, the reversal of the liabilities would result in tax benefits being recognized in the period when we determine the liabilities are no longer necessary. Any changes in estimate, or settlement of any particular position, could have a material impact on our operating results, financial condition and cash flows.

Stock-based Compensation

We measure and recognize compensation expense for all stock-based compensation awards made to employees and directors, including stock options, restricted stock units and awards related to our Employee Stock Purchase Plan ("ESPP"), based upon the grant-date fair value of those awards. The grant date fair value of restricted stock units is based on the fair value of our common stock on the date of grant. The grant date fair value of our stock options and ESPP is estimated using the Black-Scholes option pricing model.

The determination of fair value of stock options and ESPP on the date of grant, using an option-pricing model, is affected by our stock price, as well as assumptions regarding a number of highly complex and subjective variables. These variables include our expected stock price volatility over the term of the awards, actual and projected employee stock option exercise behaviors, risk-free interest rates, and expected dividends. We estimated the expected life of the awards based on an analysis of our historical experience of employee exercise and post-vesting termination behavior considered in relation to the contractual life of the options and purchase rights. The risk-free interest rate assumption is based upon observed interest rates appropriate for the expected term of the awards. We do not currently pay cash dividends on our common stock and do not anticipate doing so in the foreseeable future. Accordingly, our expected dividend yield is zero.

Stock-based compensation expense recognized in the Consolidated Statement of Operations is based on awards ultimately expected to vest and therefore has been reduced for estimated forfeitures. The stock-based compensation guidance requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Forfeitures were estimated based on historical experience.

If factors change and we employ different assumptions to determine the fair value of our stock-based compensation awards granted in future periods, the compensation expense that we record under it may differ significantly from what we have recorded in the current period.

See Note 13, "Employee Benefit Plans and Stock-based Compensation," of the notes to our Consolidated Financial Statements for additional information.

Results of Operations

Net Revenue

Prior to the fourth quarter of 2014, we operated our business in one reportable segment. Beginning in the fourth quarter of 2014, we changed our operating segments to align with how our chief operating decision maker, which for us is our Chief Executive Officer, evaluates the financial information used to allocate resources and assess our performance. The new reporting structure consists of two operating segments: Video and Cable Edge. As a result, the segment information presented has been conformed to the new operating segments for all prior periods. The Video segment sells video processing and production and playout solutions and services worldwide to service providers as well as to broadcast and media companies, including

streaming new media companies. The Cable Edge segment sells cable edge solutions and related services to cable operators globally.

The following table presents the breakdown of revenue by segments for each of the three years ended December 31, 2015, 2014 and 2013 (in thousands, except percentages):

	Year ended December 31,							
	2015	2014	2013	2015 vs. 2014		2014 vs. 2013		
Video	$ 291,779	$ 326,756	$ 381,994	$ (34,977)	(11)%	$ (55,238)	(14)%
Cable Edge	85,248	106,801	79,946	(21,553)	(20)%	26,855	34 %
Total net revenue	$ 377,027	$ 433,557	$ 461,940	$ (56,530)	(13)%	$ (28,383)	(6)%
Segment revenue as a % of total net revenue:							
Video	77%	75%	83%				
Cable Edge	23%	25%	17%				

The following table presents the breakdown of revenue by geographical region for each of the three years ended December 31, 2015, 2014 and 2013 (in thousands, except percentages):

	Year ended December 31,						
	2015	2014	2013	2015 vs. 2014		2014 vs. 2013	
Americas	$ 212,568	$ 245,849	$ 237,799	$ (33,281)	(14)%	$ 8,050	3 %
EMEA	92,422	109,645	140,929	(17,223)	(16)%	(31,284)	(22)%
APAC	72,037	78,063	83,212	(6,026)	(8)%	(5,149)	(6)%
Total net revenue	$ 377,027	$ 433,557	$ 461,940	$ (56,530)	(13)%	$ (28,383)	(6)%
Regional revenue as a % of total net revenue:							
Americas	56%	57%	51%				
EMEA	25%	25%	31%				
APAC	19%	18%	18%				

Fiscal 2015 compared to Fiscal 2014

Our Video segment net revenue decreased $35.0 million, or 11%, in 2015 compared to 2014. This decrease was primarily attributable to a $44.2 million decrease in video product revenue, offset partially by a $9.2 million increase in video service revenue. Starting in 2014, we experienced the investment pause of several of our customers as they looked ahead towards the industry's transition to Ultra HD and high-efficiency video coding ("HEVC") compression and new virtualized architectures for video processing and this negative factor extended into 2015 as we see our customer making investment decisions much slower than before. The consolidation of some of our customers in the North America and EMEA regions also contributed to the spending pause we experienced, particularly in the second half of 2015. In addition, the strengthening of the U.S. dollar contributed to the decline in our international video business, as over half of our video product revenue was derived from international customers. The increases in our service revenue were primarily due to an increase in the installed base of equipment being serviced for our customers, primarily in the Americas, in both the service provider and the broadcast and media markets.

Our Cable Edge segment net revenue decreased $21.6 million, or 20%, in 2015 compared to 2014. Revenue decreased in both our edgeQAM products as well as the new NSG Pro CCAP products in 2015 compared to 2014. The decrease was primarily due to lower spending associated with the consolidations of certain cable operators, both in the United States and Europe, particularly in the second half of 2015, which led to a delay in several of our anticipated large projects as well as some decrease in demand as some of our customers looked ahead to our new next generation CCAP technologies. We are currently developing solutions based on DOCSIS 3.1 CCAP architectures, with initial product deployment scheduled for second half of 2016.

Net revenue in the Americas decreased $33.3 million, or 14%, in 2015 compared to 2014 primarily due to the decreased demand for both our video processing products and Cable Edge products and the unfavorable impacts from industry consolidations and spending delays ahead of new next generation product technologies and architectures. This technology spending pause also contributed to the continued decline in net revenue in EMEA and APAC in 2015. APAC net revenue decreased $6.0 million, or 8%, in 2015 compared to 2014, primarily due to softer demand for our video processing products offset in part by increased revenue from our Cable Edge products. EMEA net revenue decreased $17.2 million, or 16%, in 2015 compared to 2014 with decreases across all product categories. The fragile economic and geopolitical climates in EMEA persisted in 2015 and coupled with the strengthening of the U.S. dollar, primarily drove the overall decline in revenue throughout pockets of Europe and Russia. EMEA revenue was also negatively impacted by industry consolidation in the second half of 2015.

Fiscal 2014 compared to Fiscal 2013

Our Video segment net revenue decreased $55.2 million, or 14%, in 2014 compared to 2013. This decrease was primarily attributable to a $59.5 million decrease in video product revenue, offset partially by a $4.3 million increase in video service revenue. Net revenue for our video processing products declined at nearly twice the rate of our production and playout products during 2014, primarily due to the spending pause of several of our customers as they looked ahead towards the industry's transition to Ultra HD and HEVC compression, compounded by our customers' adoption of next-generation video processing architectures, which corresponded with the launch of our software-based VOS platform in April 2014. The decrease in video segment net revenue was also impacted by EMEA's softening macroeconomic conditions in 2014. The increase in video service revenue was primarily attributable to increased maintenance revenue across all regions, except EMEA.

Our Cable Edge segment net revenue increased $26.9 million, or 34%, in 2014 compared to 2013. This increase was primarily attributable to increased sales of our NSG products, including the new NSG Pro CCAP product that was launched in the fourth quarter of 2013 and purchased by our largest U.S. cable customer. The continued increases in worldwide demand for Narrowcast edgeQAMs paired with our strategic initiative and introduction of NSG Pro platform drove the strong demand for our NSG products in the service provider market.

Net revenue in the Americas increased $8.1 million, or 3%, in 2014 compared to 2013 primarily due to increased sales of our cable edge products to North American cable operators, offset partially by decreased sales of our production and playout products to the North American broadcast and media market, which was primarily due to the spending pause ahead of the key technology transitions in the video products. This technology spending pause also contributed to the decline in net revenue in EMEA and APAC in 2014. APAC net revenue decreased $5.1 million, or 6%, in 2014 compared to 2013 and EMEA net revenue decreased $31.3 million, or 22%, in 2014 compared to 2013. The decrease in EMEA net revenue was attributable to extraordinary economic and geopolitical unrest in this region, more specifically, Russia, Africa and pockets of the Middle East, which decreased significantly in 2014, impacting overall softness throughout Europe.

Gross Profit

The following presents the gross profit and gross profit as a percentage of net revenue ("gross margin") for each of the three years ended December 31, 2015, 2014 and 2013 (in thousands, except percentages):

	Year ended December 31,			2015 vs. 2014		2014 vs. 2013	
	2015	2014	2013				
Gross profit	$ 202,712	$ 212,348	$ 220,445	$ (9,636)	(5)%	$ (8,097)	(4)%
As a percentage of net revenue ("gross margin")	53.8%	49.0%	47.7%				

Gross margin increased to 53.8% in 2015 compared to 49.0% in 2014. The increase in gross margin was primarily due to decreased expenses related to amortization, operational efficiencies and product mix shifts in our product portfolio. The expense related to amortization of intangibles included in cost of revenue decreased from $13.7 million in 2014 to $0.7 million in 2015, primarily due to the majority of our purchased tangible assets becoming fully amortized.

Gross margin increased to 49.0% in 2014 compared to 47.7% in 2013 despite a steep revenue mix shift in 2014 toward our lower margin cable edge products. The increase in gross margin was primarily due to the closing of several high-value transactions in 2014 and a higher proportion of software-rich product sales in 2014 as well as decreased expenses related to amortization of intangibles. The expense related to amortization of intangibles included in cost of revenue decreased from $19.2 million in 2013 to $13.7 million in 2014, due to certain purchased tangible assets becoming fully amortized.

Research and Development

Our research and development expense consists primarily of employee salaries and related expenses, contractors and outside consultants, supplies and materials, equipment depreciation and facilities costs, all associated with the design and development of new products and enhancements of existing products. The following table presents the research and development expenses and the expense as a percentage of net revenue for each of the three years ended December 31, 2015, 2014 and 2013 (in thousands, except percentages):

	Year ended December 31,												
	2015		2014		2013		2015 vs. 2014			2014 vs. 2013		
Research and development	$	87,545	$	93,061	$	99,938	$	(5,516)	(6)%	$	(6,877)	(7)%
As a percentage of net revenue		23.2%		21.5%		21.6%						

The $5.5 million, or 6%, decrease in research and development expense in 2015 compared to 2014 was primarily attributable to decreased headcount and related expenses as a result of our worldwide workforce reduction related to our restructuring plans, and to a lesser extent, due to a favorable impact from the strengthened U.S. dollar on our spending denominated in Israeli shekels, reimbursement of research and development expenses for work performed for one of our customers, and decreased depreciation for testing equipment.

The $6.9 million, or 7%, decrease in research and development expense in 2014 compared to 2013 was primarily attributable to decreased headcount and related expenses, and to a lesser extent, decreased prototype materials costs and decreased facilities and other expenses. The decrease in headcount related expenses was primarily a result of our restructuring programs implemented in fiscal 2013. The decreases in research and development expenses in 2014 were offset partially by increased expenses on consulting and outside engineering services primarily related to increased shift of research and development resources to lower cost facilities.

Selling, General and Administrative

The following table presents the selling, general and administrative expenses and the expense as a percentage of net revenue for each of the three years ended December 31, 2015, 2014 and 2013 (in thousands, except percentages):

	Year ended December 31,												
	2015		2014		2013		2015 vs. 2014			2014 vs. 2013		
Selling, general and administrative	$	120,960	$	131,322	$	134,014	$	(10,362)	(8)%	$	(2,692)	(2)%
As a percentage of net revenue		32.1%		30.3%		29.0%						

The $10.4 million, or 8%, decrease in selling, general and administrative expenses in 2015 compared to 2014 was primarily attributable to decreased headcount and related expenses as a result of our worldwide workforce reduction related to our restructuring plans and lower variable employee compensation related expenses as well as decreased depreciation for demonstration equipment and cost containment effort in sales and marketing related expenses. These decreases were offset in part by $1.4 million increase in legal and professional expenses in connection with the acquisition of TVN. See Note 20, "Subsequent Event-TVN Acquisition" of the notes to our Consolidated Financial Statements for additional information on the acquisition.

The $2.7 million, or 2%, decrease in selling, general and administrative expenses in 2014 compared to 2013 was primarily attributable to decreased legal and other professional fees, and to a lesser extent, decreased headcount and related expense and decreased third-party commission expense. In 2013, we had higher legal fees related to our legal proceedings with Avid as well as the legal costs attributable to shareholder activist activity in the second quarter of 2013. These decreases were offset partially by increased facilities rental and other operating expense and increased depreciation for our demonstration equipment.

Segment Operating Income

The following table presents a breakdown of operating income by segment for each of the three years ended December 31, 2015, 2014 and 2013 (in thousands, except percentages):

	Year ended December 31,							
	2015	2014	2013	2015 vs. 2014		2014 vs. 2013	
Video	$ 13,529	$ 18,073	$ 24,583	$ (4,544)	(25)%	$ (6,510)	(26)%
Cable Edge	(1,599)	1,239	(1,282)	(2,838)	(229)%	2,521	(197)%
Total segment operating income	$ 11,930	$ 19,312	$ 23,301	(7,382)	(38)%	(3,989)	(17)%

Segment operating income (loss) as a % of segment revenue:			
Video	5 %	6%	6 %
Cable Edge	(2)%	1%	(2)%

The following table presents a reconciliation of total segment operating income to consolidated loss from continuing operations before income taxes (in thousands):

	Year ended December 31,		
	2015	2014	2013
Total operating income by segment	$ 11,930	$ 19,312	$ 23,301
Unallocated corporate expenses	(2,794)	(3,076)	(2,994)
Stock-based compensation	(15,582)	(17,287)	(16,002)
Amortization of intangibles	(6,502)	(20,520)	(27,329)
Consolidated operating loss	(12,948)	(21,571)	(23,024)
Non-operating loss	(3,120)	(224)	(128)
Loss from continuing operations before income taxes	$ (16,068)	$ (21,795)	$ (23,152)

Fiscal 2015 compared to Fiscal 2014

Video segment operating income decreased $4.5 million, or 25%, in 2015 compared to 2014 and operating margin decreased from 6% in 2014 to 5% in 2015. The decrease was primarily attributable to an 11% decrease in Video segment revenue, offset in part by the favorable impact from a reduction in operating expenses primarily due to decreased headcount and employee variable compensation related expenses, depreciation for demonstration equipment and cost containment effort in sales and marketing related expenses, as well as efficiencies from manufacturing and overhead spending.

Cable Edge segment operating income decreased $2.8 million, or 229%, in 2015 compared to 2014 and operating margin decreased from 1% in 2014 to (2)% in 2015. The unfavorable impact from a 20% decrease in Cable Edge segment revenue was primarily offset by efficiencies from manufacturing and overhead spending, especially for our NSG Pro products as well as lower research and development expenses.

Fiscal 2014 compared to Fiscal 2013

Video segment operating income decreased $6.5 million, or 26%, in 2014 compared to 2013 primarily attributable to lower sales volume in 2014. Despite decreased sales volume in 2014, Video segment operating margin remained at 6% in 2014 primarily due to the closing of several high-value transactions in 2014 and a higher proportions of software-rich product sales in 2014.

Cable Edge segment operating income increased $2.5 million, or 197%, in 2014 compared to 2013 and operating margin increased from (2)% in 2013 to 1% in 2014. The increase in Cable Edge operating income and margin in 2014 was attributable to a higher sales volume in 2014, a higher proportion of software-rich product sales in 2014, and continued improvements to our supply chain and manufacturing processes.

Amortization of Intangibles

Amortization of intangibles was $5.8 million, $6.8 million and $8.1 million during 2015, 2014 and 2013 respectively. The decreases in the amortization of intangibles expense in each year were primarily due to certain purchased tangible assets becoming fully amortized.

Restructuring and Asset Impairment Charges

We implemented several restructuring plans in the past few years and recorded restructuring and asset impairment charges of $1.5 million, $3.1 million and $2.2 million for the years ended December 31, 2015, 2014 and 2013, respectively. The goal of these plans was to bring operational expenses to appropriate levels relative to its net revenues, while simultaneously implementing extensive company-wide expense control programs.

We account for our restructuring plans under the authoritative guidance for exit or disposal activities. The restructuring and asset impairment charges are included in "Product cost of revenue" and "Operating expenses-restructuring and asset impairment charges" in the Consolidated Statements of Operations. The following table summarizes the restructuring and asset impairment charges (in thousands):

	Year ended December 31,		
	2015	2014	2013
Product cost of revenue	$ 113	$ 315	$ 823
Operating expenses-Restructuring and asset impairment charges	1,372	2,761	1,421
Total	$ 1,485	$ 3,076	$ 2,244

The restructuring charges of $1.5 million in 2015 were under the Harmonic 2015 Restructuring Plan which primarily consisted of severance and benefits for the termination of 37 employees worldwide.

The restructuring and asset impairment charges of $3.1 million in 2014 consisted of $2.2 million and $0.9 million incurred under the Harmonic 2015 Restructuring Plan and Harmonic 2013 Restructuring Plan, respectively. The Harmonic 2015 Restructuring Plan was approved and initiated in the fourth quarter of 2014 and the charges recorded under this Plan in 2014 consisted of $1.1 million fixed asset impairment charge related to software development costs incurred for a discontinued project, $0.6 million of severance and benefits related to the termination of 19 employees worldwide, $0.3 million of excess materials costs associated with the termination of a research and development project and $0.1 million of other charges. The $0.9 million restructuring and asset impairment charges recorded in 2014 related to the Harmonic 2013 Restructuring Plan which commenced in 2013 and extended through the third quarter of 2014 consisted primarily of severance and benefits related to the termination of 25 employees worldwide.

The restructuring charges of $2.2 million in 2013 were under the Harmonic 2013 Restructuring Plan and consisted of $1.7 million severance and benefits related to the termination of 85 employees worldwide. In addition, we wrote-down, to its estimated net realizable value, leasehold improvements and furniture related to our Milpitas warehouse by $0.1 million, and wrote-down inventory to reflect $0.4 million of obsolete inventories arising from the restructuring of our Israel facilities.

See Note 11, "Restructuring and Asset Impairment Charges," of the notes to our Consolidated Financial Statements for additional information.

Interest Income (Expense), Net

Interest income (expense), net was $(0.3) million, $0.1 million and $0.2 million during 2015, 2014 and 2013, respectively. Interest expense increased in 2015 reflecting the additional interest expense associated with the convertible senior notes issued in December 2015.

In December 2015, we issued $128.25 million aggregate principal amount of convertible senior notes due 2020 ("the Notes") through a private placement with a financial institution. The Notes bear interest at 4.00% per annum, which is payable semiannually in arrears on June 1 and December 1 of each year, commencing June 1, 2016. In accordance with accounting guidance on embedded conversion features, we valued and bifurcated the conversion option associated with the Notes recording $26.9 million in stockholders' equity. We incurred approximately $4.1 million of debt issuance costs in connection with the issuance of the Notes which we recorded as a deduction to the carrying amount of the Notes and $0.8 million of debt issuance costs was allocated to stockholders' equity. The resulting net debt discount, difference between the principal amount of the Notes and the carrying value of the Notes, of $30.2 million is amortized to interest expenses at an effective interest rate of 9.94% over the contractual term of the Notes. In 2015, we recorded $240,000 of coupon interest expense and $216,000 of interest expenses related to the amortization of debt discount. (See Note 12, "Convertible Notes and Credit Facility," of the notes to our Consolidated Financial Statements for additional information on the Notes).

Other Expense, Net

Other expense, net was $0.3 million, $0.4 million and $0.3 million during 2015, 2014 and 2013, respectively. Other expense, net is primarily comprised of foreign exchange gains and losses on cash, accounts receivable and intercompany balances denominated in currencies other than the U.S. dollar. To mitigate the volatility related to fluctuations in the foreign exchange rates, we enter into various foreign currency forward contracts. The gain (loss) on foreign currency is driven by the fluctuations in the foreign currency exchanges rates, primarily the Euro, British pound, Japanese yen and Israeli shekels.

Loss on Impairment of Long-term Investment

We attended a VJU board meeting on March 5, 2015 as an observer. At that meeting, we were made aware of significant decreases in VJU's business prospects, VJU'S existing working capital and prospects for additional funding, compared to the prior information we had received from VJU. Based on our assessment, we determined that our investment in VJU was impaired on an other-than-temporary basis. Factors considered included the severity of the impairment and recent events specific to VJU. Based on our assessment of VJU's expected cash flows, the entire investment is expected to be non-recoverable. As a result, we recorded an impairment charge of $2.5 million in the first quarter of 2015. Our impairment loss in VJU is limited to our initial cost of investment of $2.5 million as well as the $0.1 million of research and development cost expensed in September 2014.

For the years ended December 31, 2015 and 2014, we recorded $0.8 million and $0.7 million, respectively, of unrealized losses in accumulated other comprehensive loss relating to our investment in Vislink. We determined that there was no impairment indicators existing at December 31, 2015 that would indicate that the Vislink investment was impaired and we believe the decline in the fair value of Vislink investment was not other than temporary. However, sustained depression of Vislink's stock price coupled with deterioration in financial condition and near term prospects of the investment may lead to an other-than-temporary impairment assessment in 2016. As of December 31, 2015, our maximum exposure to loss from the Vislink investment was limited to our initial investment cost of $3.3 million.

See Note 5, "Investments in Other Equity Securities" of the notes to our Consolidated Financial Statements for additional information.

Income Taxes

We reported the following operating results for each of the three years ended December 31, 2015, 2014 and 2013 (in thousands, except percentages):

	Year ended December 31,		
	2015	**2014**	**2013**
Loss from continuing operations before income taxes	(16,068)	(21,795)	(23,152)
Provision for (benefit from) income taxes	(407)	24,453	(44,741)
Effective income tax rate	3%	(112)%	193%

Our effective tax rate generally differs from the U.S. federal statutory rate of 35% due to favorable tax rates associated with certain earnings from our operations in lower tax jurisdictions throughout the world. In addition, our effective tax rates vary in each period primarily due to specific one-time, discrete items that affected the tax rate in the respective period.

In 2015, our effective income tax rate of 3% differed from the U.S. federal statutory rate of 35%, primarily due to a difference in foreign tax rates and our losses generated in the United States for the year received no tax benefit as a result of a full valuation allowance against all of our U.S. deferred tax assets, as well as adjustments relating to our 2014 U.S. federal tax return filed in September 2015 and a reversal of uncertain tax positions resulting from the expiration of statutes of limitations. In addition, the impairment of the VJU investment (see Note 5, "Investments in Other Equity Securities") received no tax benefit.

In 2014, as a result of cumulated losses in the recent years and the analysis of all available positive and negative evidence, we recorded a full valuation allowance against the beginning of year U.S. net deferred tax assets of $34.0 million. In addition, in 2014, we carried back our 2013 federal net operating loss to 2011 resulting in a tax refund. Certain federal R&D credits were also freed up as a result and utilized to offset income tax reserves as a result of the adoption of ASU 2013-11. These two events reduced the valuation allowance by approximately $5.0 million and led to the net change of valuation allowance of $29.0 million. This unfavorable net impact was offset partially by a tax benefit of $9.0 million associated with the release of tax reserves including accrued interest and penalties, for our 2010 tax year in the United States, as a result of the expiration of the applicable statute of limitation for that year.

In 2013, the benefit from income taxes included a release of $39.0 million of tax reserves, including accrued interests and penalties, for our 2008 and 2009 tax years in the United States, as a result of the expiration of the applicable statute of limitations for those tax years. In addition, in 2013, we recorded a $2.4 million tax benefit from the reinstatement of the 2012 U.S. federal research tax credit.

For a reconciliation of our effective tax rate to the U.S. federal statutory rate of 35% and further explanation of our provision for taxes, see Note 15, “Income Taxes,” of the notes to our Consolidated Financial Statements.

Discontinued Operations

On February 18, 2013, the Company entered into an Asset Purchase Agreement with Aurora pursuant to which the Company agreed to sell its cable access HFC business for $46 million in cash. On March 5, 2013, the sale transaction closed and the Company received gross proceeds of $46 million from the sale and recorded a net gain of $14.7 million in connection with the sale. See Note 3, “Discontinued Operations” of the notes to our Consolidated Financial Statements for additional information.

Liquidity and Capital Resources

Our primary sources of liquidity are cash generated from operations and funds available from financing obtained from capital markets. Cash generated from operations is dependent on a number of factors, including the timing of billings and collections, our operating results, the timing and amount of tax and other liability payment.

In 2015, we generated cash from operations of $6.4 million and obtained $124.7 million of net proceeds from the issuance of the Notes. As of December 31, 2015, our cash and cash equivalents totaled $126.2 million, and our short-term investments totaled $26.6 million, of which $27.9 million of the cash and cash equivalents balance was held in our foreign subsidiaries. At present, such foreign funds are considered to be indefinitely reinvested in foreign countries to the extent of indefinitely reinvested foreign earnings. In the event funds from foreign operations are needed to fund cash needs in the United States and if U.S. taxes have not already been previously accrued, we would be required to accrue and pay additional U.S. taxes in order to repatriate these funds.

In December 2015, we issued $128.25 million aggregate principal amount of the Notes. We incurred approximately $4.1 million of debt issuance cost, of which $3.5 million was paid in 2015 and the remainder will be paid in the first quarter of 2016. The Notes bear interest at a fixed rate of 4.00% per year, payable semiannually in arrears on June 1 and December 1 of each year, beginning on June 1, 2016 and mature on December 1, 2020. Concurrent with the issuance of the Notes, we used $49.9 million of the net proceeds from the Notes to repurchase 11.1 million shares of our common stock. The remaining net proceeds from the Notes was used to fund our acquisition of TVN, which was completed on February 29, 2016. (See Note 20, “Subsequent Event-TVN Acquisition,” of the notes to our Consolidated Financial Statements for additional information on TVN Acquisition).

On December 22, 2014, we entered into a Credit Agreement (the “Credit Agreement”) with JPMorgan Chase Bank, N.A. (“JPMorgan”) for a $20.0 million revolving credit facility, with a sublimit of $10.0 million for the issuance of commercial and standby letters of credit on our behalf. Revolving loans under the Credit Agreement may be borrowed, repaid and re-borrowed until December 22, 2015, at which time all amounts borrowed must be repaid. On December 7, 2015, we entered into a first amendment to the Credit Agreement with JPMorgan to permit us to incur the indebtedness related to issuance of the Notes. On December 15, 2015, we entered into a second amendment to the Credit Agreement with JPMorgan to extend the expiration date of the Credit Agreement to February 20, 2016. We did not renew the Credit Agreement and it duly expired on February 20, 2016. There were no borrowings under the Credit Agreement during the year ended December 31, 2015. As of December 31, 2015, we were in compliance with the covenants under the Credit Agreement.

We believe that existing funds combined with cash provided by future operating activities are adequate to satisfy our working capital, potential acquisitions and capital expenditure requirements and other contractual obligations for the foreseeable future, including at least the next 12 months. However, if our expectations are incorrect, we may need to raise additional funds to fund our operations, to take advantage of unanticipated strategic opportunities or to strengthen our financial position. In the future, we may enter into other arrangements for potential investments in, or acquisitions of, complementary businesses, services or technologies, which could require us to seek additional equity or debt financing. Additional funds may not be available on terms favorable to us or at all.

	Year ended December 31,		
	2015	2014	2013
	(In thousands)		
Net cash provided by operating activities	$ 6,351	$ 47,369	$ 53,759
Net cash provided by (used in) investing activities	(10,414)	27,799	51,094
Net cash provided by (used in) financing activities	57,533	(92,007)	(111,202)
Effect of exchange rate changes on cash and cash equivalents	(312)	(458)	8
Net increase (decrease) in cash and cash equivalents	$ 53,158	$ (17,297)	$ (6,341)

Operating Activities

Our cash flows from operating activities will continue to be affected principally by our profitability, working capital requirements, and the continued growth in revenue and timing of billing and cash collections. Our largest source of operating cash flows is cash collections from our customers. Our primary uses of cash from operating activities are for personnel related expenditures, purchases of inventory and rent payments.

Net cash provided by operating activities was $6.4 million in 2015, a decrease of $41.0 million compared to 2014, which resulted from our net loss of $15.7 million, adjusted for non-cash items of $41.8 million and a $19.8 million decrease in cash associated with the net change in operating assets and liabilities. The non-cash items primarily consisted of amortization of intangibles, stock-based compensation, depreciation, and a $2.5 million impairment loss on long-term investment. The net change in operating assets and liabilities primarily included increases in prepaid and other current assets and inventories, as well as decreases in accrued and other liabilities and deferred revenue, which were offset in part by an increase in accounts payable. The increase in prepaid and other current assets was primarily due to an $8.5 million advance payment made to an inventory supplier in 2015 in order to secure more favorable pricing from the supplier and this amount is anticipated to be offset against accounts payable owed to this supplier in the first quarter of 2017. The increase in inventories was mainly driven by inventory built up for our new NSG Pro products. The decrease in accrued liabilities was primarily due to lower accruals for salaries and benefits as well as bonus and commissions resulting from the reduction of our worldwide workforce related to our restructuring plans. The decrease in deferred revenue was primarily due to the timing of periodic service and support billings for annual contracts.

Net cash provided by operations was $47.4 million in 2014, a decrease of $6.4 million compared to 2013, which resulted from our net loss of $46.2 million, adjusted for non-cash items of $93.6 million. The non-cash items primarily consisted of amortization of intangibles, stock-based compensation, depreciation and change in deferred income taxes. Deferred income taxes decreased $32.2 million primarily related to the increase in U.S. federal and California tax valuation allowance as a result of our history of recent operating losses that has led to uncertainty with respect to our ability to realize certain of our net deferred tax assets. The net change in operating assets and liabilities in 2014 were minimal. The increase in deferred revenue due to the timing of periodic service and support billings for annual contracts was offset by a decrease in income tax payable primarily due to the reversal of federal income tax reserves as a result of the expiration of the statute of limitation and a decrease in accrued liabilities primarily due to lower accrual for headcount related expenses as well as an increase in prepaid and other assets of $3.3 million primarily related to an advance payment for software license purchases paid to Vislink, plc (“Vislink”), a U.K. public company listed on the AIM exchange (see Note 5, “Investments in Other Equity Securities” of the notes to our Consolidated Financial Statements for additional information).

We expect that cash provided by operating activities may fluctuate in future periods as a result of a number of factors, including fluctuations in our operating results, shipment linearity, accounts receivable collections performance, inventory and supply chain management, income tax reserves adjustments, and the timing and amount of compensation and other payments. We usually pay our annual incentive compensation to employees in the first quarter.

Investing Activities

Net cash used in investing activities during 2015 was $10.4 million, a decrease of $38.2 million compared to cash provided by investing activities of $27.8 million in 2014. The decrease was primarily due to lower proceeds from net sales of available-for-sale investments in 2015 as well as higher capital expenditures in 2015.

Net cash provided by investing activities during 2014 was $27.8 million, a decrease of $23.3 million compared to 2013. The decrease was primarily due to net proceeds from the sale of discontinued operations of $43.5 million received in 2013 and the purchases of long-term investments of $9.4 million in 2014, offset in part by lower capital expenditures and lower net purchases of available-for-sale investments in 2014.

Financing Activities

Net cash provided by financing activities during 2015 was $57.5 million, an increase of $149.5 million compared to 2014. The increase was primarily due to net proceeds of $124.7 million from the sale and issuance of the Notes in December 2015 as well as lower amount of cash used for share repurchases in 2015 and to a lesser extent, higher net proceeds from sale of shares through equity incentive plans during 2015. Cash used for share repurchases in 2015 was $72.9 million, consisting of $23.0 million under our regular common stock repurchase program and $49.9 million of the net proceeds from the issuance of the Notes.

Net cash used in financing activities during 2014 was $92.0 million, a decrease of $19.2 million compared to 2013. The decrease was primarily due to lower amount of cash used for share repurchases in 2014, and to a lesser extent, higher net proceeds from sale of shares through equity incentive plans during 2013, compared to 2014.

Off-Balance Sheet Arrangements

None as of December 31, 2015.

Contractual Obligations and Commitments

Future payments under contractual obligations and other commercial commitments, as of December 31, 2015 are as follows (in thousands):

	Payments Due by Period				
	Total Amounts Committed	1 Year or Less	2 -3 Years	4-5 Years	Over 5 Years
Convertible debt	$ 128,250	$ —	$ —	$ 128,250	$ —
Interest on convertible debt	25,462	4,942	10,260	10,260	—
Operating leases (1)	45,537	10,784	19,988	14,089	676
Purchase commitments (2)	15,295	15,295	—	—	—
Total contractual obligations	$ 214,544	$ 31,021	$ 30,248	$ 152,599	$ 676
Other commercial commitments:					
Standby letters of credit	$ 678	$ 678	$ —	$ —	$ —
Indemnification obligations (3)	—	—	—	—	—
Total commercial commitments	$ 678	$ 678	$ —	$ —	$ —

(1) We lease facilities under operating leases expiring through November 2022. Certain of these leases provide for renewal option for periods ranging from one to five years in the normal course of business and we may exercise the renewal option.

(2) During the normal course of business, in order to reduce manufacturing lead times and ensure adequate component supply, we enter into agreements with certain contract manufacturers and suppliers that allow them to procure inventory and services based upon criteria as defined by the Company.

(3) We indemnify our officers and the members of our Board pursuant to our bylaws and contractual indemnity agreements. We also indemnify some of our suppliers and most of our customers for specified intellectual property matters and some of our other vendors, such as building contractors, pursuant to certain parameters and restrictions. The scope of these indemnities varies, but, in some instances, includes indemnification for defense costs, damages and other expenses (including reasonable attorneys' fees).

Due to the uncertainty with respect to the timing of future cash flows associated with our unrecognized tax benefits at December 31, 2015, we are unable to make reasonably reliable estimates of the period of cash settlement with the respective taxing authority. Therefore, approximately $3.9 million of unrecognized tax benefits classified as "Income taxes payable, long-term" in the accompanying Consolidated Balance Sheet as of December 31, 2015, had been excluded from the contractual obligations table above. See Note 15, "Income Taxes" of the notes to our Consolidated Financial Statements for a discussion on income taxes.

New Accounting Pronouncements

See Note 2 of the accompanying Consolidated Financial Statements for a full description of recent accounting pronouncements, including the respective expected dates of adoption and effects on results of operations and financial condition.

Item 7A. *QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.*

Foreign Currency Exchange Risk

We operate in international markets, which expose us to market risk associated with foreign currency exchange rate fluctuations between the U.S. Dollar and various foreign currencies.

We have certain international customers who are billed in their local currency, primarily the Euro, British pound and Japanese yen. Sales denominated in foreign currencies were approximately 12%, 10%, and 12% of net revenue in 2015, 2014 and 2013, respectively. In addition, a portion of our operating expenses, primarily the cost of personnel to deliver technical support on our products and professional services, sales and sales support and research and development, are denominated in foreign currencies, primarily the Israeli shekel. We use derivative instruments, primarily forward contracts, to manage exposures to foreign currency exchange rates and we do not enter into foreign currency forward contracts for trading purposes.

Derivatives Designated as Hedging Instruments (Cash Flow Hedges)

Beginning December 2014, we entered into forward currency contracts to hedge forecasted operating expenses and service cost related to employee salaries and benefits denominated in Israeli shekels (“ILS”) for our subsidiaries in Israel. These ILS forward contacts mature generally within 12 months and are designated as cash flow hedges. The effective portion of the gains or losses on the derivative is reported as a component of “Accumulated other comprehensive income (loss)” (“AOCI”) in the Consolidated Balance Sheet and subsequently reclassified into earnings in the same period during which the hedged transactions are recognized in earnings. If the hedge program becomes ineffective or if the underlying forecasted transaction does not occur for any reason, or it becomes probable that it will not occur, the gain or loss on the related derivative will be reclassified from AOCI to earnings immediately.

Derivatives Not Designated as Hedging Instruments (Balance Sheet Hedges)

We also enter into forward currency contracts to hedge foreign currency denominated monetary assets and liabilities. These derivative instruments are marked to market through earnings every period and mature generally within three months. Changes in the fair value of these foreign currency forward contracts are recognized in “Other income (expense), net” in the Consolidated Statement of Operations, net and are largely offset by the changes in the fair value of the assets or liabilities being hedged.

The U.S. dollar equivalent of all outstanding notional amounts of foreign currency forward contracts are summarized as follows (in thousands):

	December 31,	
	2015	2014
Derivatives designated as cash flow hedges:		
Purchase	$ 12,984	$ 16,903
Derivatives not designated as hedging instruments:		
Purchase	$ 6,942	$ 1,043
Sell	$ 11,332	$ 4,925

Interest Rate Risk

Our exposure to market risk for changes in interest rates relates primarily to our investment portfolio of marketable debt securities of various issuers, types and maturities and to our borrowings under the bank line of credit facility. As of December 31, 2015, our cash, cash equivalents and short-term investments balance was $152.8 million and we have no borrowings under the bank line of credit during the year ended December 31, 2015. Our short-term investments are classified as available for sale

and are carried at estimated fair value with unrealized gains and losses reported in "accumulated other comprehensive income (loss)". For the years ended December 31, 2015, 2014 and 2013, realized gains and realized losses from the sale of investments were not material. As of December 31, 2015, we had $128.25 million aggregate principal amount of the Notes outstanding, which have a fixed coupon rate.

Our cash, cash equivalents and short-term investments are held for working capital purposes. We do not use derivative financial instruments in our investment portfolio. We have an investment portfolio of fixed income securities that are classified as "available-for-sale securities." These securities, like all fixed income instruments, are subject to interest rate risk and will fall in value if market interest rates increase. We attempt to limit this exposure by investing primarily in short-term and investment-grade instruments with original maturities of less than two years. Due to the short duration and conservative nature of our investment portfolio, a movement of 10% in market interest rates would not have a material impact on our operating results and the total value of the portfolio over the next fiscal year. If overall interest rates had fallen by 10% during fiscal 2015, our interest income on cash, cash equivalents and short-term investments would have declined by less than $0.1 million assuming consistent investment levels.

For the years ended December 31, 2015 and 2014, we recorded $0.8 million and $0.7 million, respectively, of unrealized losses in accumulated other comprehensive loss relating to our investment in Vislink (See Note 5, "Investments in Other Equity Securities," of the notes to our Consolidated Financial Statements for additional information). We determined that there was no impairment indicators existing at December 31, 2015 that would indicate that the Vislink investment was impaired and we believe the decline in the fair value of Vislink investment was not other than temporary. However, sustained depression of Vislink's stock price coupled with deterioration in financial condition and near term prospects of the investment may lead to an other-than-temporary impairment assessment in 2016. As of December 31, 2015, our maximum exposure to loss from the Vislink investment was limited to our initial investment cost of $3.3 million.

Item 8. ***FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA***

Index to Consolidated Financial Statements

	Page
Report of Independent Registered Public Accounting Firm	56
Consolidated Balance Sheets	57
Consolidated Statements of Operations	58
Consolidated Statements of Comprehensive Income (Loss)	59
Consolidated Statements of Stockholders' Equity	60
Consolidated Statements of Cash Flows	61
Notes to Consolidated Financial Statements	62

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Harmonic Inc.:

In our opinion, the accompanying Consolidated Balance Sheets and the related Consolidated Statements of Operations, Consolidated Statements of Comprehensive Income (Loss), Consolidated Statements of Stockholders' Equity, and Consolidated Statements of Cash Flows present fairly, in all material respects, the financial position of Harmonic Inc. and its subsidiaries at December 31, 2015 and December 31, 2014, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2015 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it classifies deferred tax assets and liabilities on the consolidated balance sheet in 2015.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/S/ PRICEWATERHOUSECOOPERS LLP

PRICEWATERHOUSECOOPERS LLP

San Jose, California

March 24, 2016

HARMONIC INC.

CONSOLIDATED BALANCE SHEETS

(In thousands, except per share data)

	December 31,	
	2015	**2014**
ASSETS		
Current assets:		
Cash and cash equivalents	$ 126,190	$ 73,032
Short-term investments	26,604	31,847
Accounts receivable, net	69,515	74,144
Inventories	38,819	32,747
Deferred tax assets, short-term	—	3,375
Prepaid expenses and other current assets	25,003	17,539
Total current assets	286,131	232,684
Property and equipment, net	27,012	27,221
Goodwill	197,781	197,884
Intangibles, net	4,097	10,599
Other assets	9,936	12,130
Total assets	$ 524,957	$ 480,518
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 19,364	$ 15,318
Income taxes payable	307	893
Deferred revenue	33,856	38,601
Accrued liabilities	31,354	35,118
Total current liabilities	84,881	89,930
Convertible debt, long-term	98,295	—
Income taxes payable, long-term	3,886	4,969
Deferred tax liabilities, long-term	—	3,095
Other non-current liabilities	9,727	10,711
Total liabilities	196,789	108,705
Commitments and contingencies (Note 18)		
Stockholders' equity:		
Preferred stock, $0.001 par value, 5,000 shares authorized; no shares issued or outstanding	—	—
Common stock, $0.001 par value, 150,000 shares authorized; 76,015 and 87,700 shares issued and outstanding at December 31, 2015 and 2014, respectively	76	88
Additional paid-in capital	2,236,418	2,261,952
Accumulated deficit	(1,903,908)	(1,888,247)
Accumulated other comprehensive loss	(4,418)	(1,980)
Total stockholders' equity	328,168	371,813
Total liabilities and stockholders' equity	$ 524,957	$ 480,518

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

HARMONIC INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share data)

	Year ended December 31,		
	2015	**2014**	**2013**
Revenue:			
Product	$ 276,876	$ 343,186	$ 376,598
Service	100,151	90,371	85,342
Total net revenue	377,027	433,557	461,940
Cost of revenue:			
Product	121,988	172,280	196,766
Service	52,327	48,929	44,729
Total cost of revenue	174,315	221,209	241,495
Total gross profit	202,712	212,348	220,445
Operating expenses:			
Research and development	87,545	93,061	99,938
Selling, general and administrative	120,960	131,322	134,014
Amortization of intangibles	5,783	6,775	8,096
Restructuring and asset impairment charges	1,372	2,761	1,421
Total operating expenses	215,660	233,919	243,469
Loss from operations	(12,948)	(21,571)	(23,024)
Interest (expense) income, net	(333)	132	219
Other expense, net	(282)	(356)	(347)
Loss on impairment of long-term investment	(2,505)	—	—
Loss from continuing operations before income taxes	(16,068)	(21,795)	(23,152)
Provision for (benefit from) income taxes	(407)	24,453	(44,741)
Income (loss) from continuing operations	(15,661)	(46,248)	21,589
Income from discontinued operations, net of taxes (including gain on disposal of $14,663, net of taxes, for the year ended December 31, 2013)	—	—	15,438
Net income (loss)	$ (15,661)	$ (46,248)	$ 37,027
Basic net income (loss) per share from:			
Continuing operations	$ (0.18)	$ (0.50)	$ 0.20
Discontinued operations	$ —	$ —	$ 0.14
Net income (loss)	$ (0.18)	$ (0.50)	$ 0.35
Diluted net income (loss) per share from:			
Continuing operations	$ (0.18)	$ (0.50)	$ 0.20
Discontinued operations	$ —	$ —	$ 0.14
Net income (loss)	$ (0.18)	$ (0.50)	$ 0.34
Shares used in per share calculations:			
Basic	87,514	92,508	106,529
Diluted	87,514	92,508	107,808

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

HARMONIC INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(In thousands)

	Year ended December 31,		
	2015	**2014**	**2013**
Net income (loss)	$ (15,661)	$ (46,248)	$ 37,027
Other comprehensive income (loss), before tax:			
Change in unrealized gain (loss) on cash flow hedges:			
Unrealized gain (loss), net arising during the period	(133)	311	—
Gains reclassified into earnings	(424)	—	—
	(557)	311	—
Change in unrealized gains (loss) on available-for-sale securities	(785)	(815)	4
Change in foreign currency translation adjustments	(1,111)	(1,281)	260
Other comprehensive income (loss) before tax	(2,453)	(1,785)	264
Provision for (benefit from) income taxes	(15)	(14)	8
Other comprehensive income (loss), net of tax	(2,438)	(1,771)	256
Total comprehensive income (loss)	$ (18,099)	$ (48,019)	$ 37,283

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

HARMONIC INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(In thousands)

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount				
Balance at December 31, 2012	114,193	$ 114	$ 2,432,790	$ (1,879,026)	$ (465)	$ 553,413
Net income	—	—	—	37,027	—	37,027
Other comprehensive income, net of tax	—	—	—	—	256	256
Issuance of Common Stock under option, stock award and purchase plans	3,482	3	5,183	—	—	5,186
Repurchase of Common Stock	(18,262)	(18)	(116,511)	—	—	(116,529)
Stock-based compensation	—	—	16,089	—	—	16,089
Reduction in excess tax benefits from stock-based compensation	—	—	(1,276)	—	—	(1,276)
Balance at December 31, 2013	99,413	99	2,336,275	(1,841,999)	(209)	494,166
Net loss	—	—	—	(46,248)	—	(46,248)
Other comprehensive loss, net of tax	—	—	—	—	(1,771)	(1,771)
Issuance of Common Stock under option, stock award and purchase plans	2,181	2	1,104	—	—	1,106
Repurchase of Common Stock	(13,894)	(13)	(93,115)	—	—	(93,128)
Stock-based compensation	—	—	17,287	—	—	17,287
Excess tax benefits from stock-based compensation	—	—	401	—	—	401
Balance at December 31, 2014	87,700	88	2,261,952	(1,888,247)	(1,980)	371,813
Net loss	—	—	—	(15,661)	—	(15,661)
Other comprehensive loss, net of tax	—	—	—	—	(2,438)	(2,438)
Issuance of Common Stock under option, stock award and purchase plans	2,855	3	5,670	—	—	5,673
Repurchase of Common Stock	(14,540)	(15)	(72,848)	—	—	(72,863)
Stock-based compensation	—	—	15,582	—	—	15,582
Conversion feature of convertible notes due 2020	—	—	26,062	—	—	26,062
Balance at December 31, 2015	76,015	$ 76	$ 2,236,418	$ (1,903,908)	$ (4,418)	$ 328,168

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

HARMONIC INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

	Year ended December 31,		
	2015	**2014**	**2013**
Cash flows from operating activities:			
Net income (loss)	$ (15,661)	$ (46,248)	$ 37,027
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Amortization of intangibles	6,502	20,520	27,329
Depreciation	13,241	16,459	16,641
Stock-based compensation	15,582	17,287	16,089
Amortization of discount on convertible debt	216	—	—
Gain on sale of discontinued operations, net of tax	—	—	(14,663)
Restructuring, asset impairment and (gain) loss on retirement of fixed assets	641	1,622	244
Loss on impairment of long-term investment	2,505	—	—
Deferred income taxes, net	(512)	32,163	(8,537)
Provision for doubtful accounts, returns and discounts	2,034	1,943	960
Provision for excess and obsolete inventories	1,585	2,569	3,475
Excess tax benefits from stock-based compensation	—	(15)	(141)
Other non-cash adjustments, net	—	1,108	2,098
Changes in assets and liabilities:			
Accounts receivable	2,595	(1,035)	9,908
Inventories	(5,954)	1,610	13,290
Prepaid expenses and other assets	(8,206)	(3,332)	1,807
Accounts payable	4,683	56	(3,363)
Deferred revenues	(4,541)	11,162	(1,922)
Income taxes payable	(1,637)	(7,094)	(40,546)
Accrued and other liabilities	(6,722)	(1,406)	(5,937)
Net cash provided by operating activities	6,351	47,369	53,759
Cash flows from investing activities:			
Purchases of investments	(25,261)	(26,599)	(78,764)
Proceeds from maturities of investments	30,379	60,811	63,034
Proceeds from sales of investments	—	13,045	37,890
Purchases of property and equipment	(14,356)	(10,065)	(14,581)
Proceeds from sale of discontinued operations, net of selling costs	—	—	43,515
Purchases of long-term investments	(85)	(9,393)	—
Restricted cash	(1,091)	—	—
Net cash provided by (used in) investing activities	(10,414)	27,799	51,094
Cash flows from financing activities:			
Proceeds from convertible debt	128,250	—	—
Payment of convertible debt issuance cost	(3,527)	—	—
Proceeds from common stock issued to employees	9,222	4,742	8,521
Payment of tax withholding obligations related to net share settlements of restricted stock units	(3,549)	(3,636)	(3,335)
Payments for repurchases of common stock	(72,863)	(93,128)	(116,529)
Excess tax benefits from stock-based compensation	—	15	141
Net cash provided by (used in) financing activities	57,533	(92,007)	(111,202)
Effect of exchange rate changes on cash and cash equivalents	(312)	(458)	8
Net increase (decrease) in cash and cash equivalents	53,158	(17,297)	(6,341)
Cash and cash equivalents at beginning of period	73,032	90,329	96,670
Cash and cash equivalents at end of period	$ 126,190	$ 73,032	$ 90,329
Supplemental disclosures of cash flow information:			
Income tax payments, net	$ 952	$ 1,926	$ 4,341
Supplemental schedule of non-cash investing and financing activities:			
Capital expenditures incurred but not yet paid	$ 235	$ 854	$ 434
Debt issuance costs incurred but not yet paid	582	—	—

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

HARMONIC INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1: DESCRIPTION OF BUSINESS

Harmonic Inc. (“Harmonic” or the “Company”) designs, manufactures and sells versatile and high performance video infrastructure products and system solutions that enable its customers to efficiently create, prepare and deliver a full range of video services to televisions and other devices, such as personal computers, laptops, tablets and smart phones. Our products generally fall into three principal categories: video production platforms and playout solutions, video processing solutions and cable edge solutions. Harmonic also provides technical support and professional services to its customers worldwide. We sell our products and services to cable operators, broadcast and media companies, satellite and telecommunications (telco) Pay-TV service providers and streaming new media companies.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying consolidated financial statements of Harmonic include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation. The Company’s fiscal quarters are based on 13-week periods, except for the fourth quarter which ends on December 31.

Discontinued Operations

On March 5, 2013, the Company completed the sale of its cable access hybrid-fiber coaxial (“HFC”) business to Aurora Networks (“Aurora”) for $46.0 million in cash. The results of operations associated with the cable access HFC business were presented as discontinued operations in its condensed consolidated financial statements as described in Note 3, “Discontinued Operations”. There were no operating activities associated with the cable access HFC business after December 31, 2013. Unless noted otherwise, all discussions herein with respect to the Company’s audited consolidated financial statements relate to the Company’s continuing operations.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with generally accepted accounting principles in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Reclassifications / Out-of-Period Adjustments

Starting in the second quarter of 2015, in lieu of presenting the amortization of investment premium as a positive adjustment in the reconciliation of net income to operating cash flows, the entire cash flow, including premium is now reflected as an investing outflow, akin to a return of capital. The Company adopted this new classification method on a prospective basis starting 2015 because the new classification method does not have a material impact to the Company’s Consolidated Statements of Cash Flow for all prior periods effected.

Cash and Cash Equivalents and Short-term investments

Cash and cash equivalents include all cash and highly liquid investments with maturities of three months or less at the date of purchase. The carrying amount of cash and cash equivalents approximates fair value because of the short maturity of those instruments.

Restricted Cash and Deposits

As of December 31, 2015, the Company had $1.1 million of total restricted cash. The restricted cash balances are held as cash collateral security for certain bank guarantees and it is included in “Prepaid expenses and other current assets” in the Company’s Consolidated Balance Sheet. These restricted funds are invested in bank deposits and cannot be withdrawn from the Company’s accounts without the prior written consent of the applicable secured party.

Short-Term Investments

The Company’s short-term investments, which are classified as available-for-sale securities, comprised primarily of U.S. federal government bonds, state, municipal and local government agencies bonds, corporate bonds, commercial paper and

certificates of deposit, with stated maturities greater than three months from the date of purchase. The Company may or may not hold these securities until maturity because after considering the Company's liquidity requirements, the Company may sell these securities prior to their stated maturities. Since these securities are considered as available to support current operations, the Company classifies securities with maturities beyond 12 months as current assets under short-term investments in the Consolidated Balance Sheets.

Short-term investments are stated at fair value, with unrealized gains and losses reported in accumulated other comprehensive income (loss) in the Consolidated Balance Sheet. The specific identification method is used to determine the cost of securities disposed of, with realized gains and losses reflected in other income (expense), net in the Company's Consolidated Statements of Operations. The Company monitors its investment portfolio for impairment on a periodic basis. In the event a decline in value is determined to be other than temporary, an impairment charge is recorded. The Company considers current market conditions, as well as the likelihood that it would need to sell its investments prior to a recovery of par value, when determining if a loss is other than temporary.

Investments in Equity Securities

From time to time, the Company may acquire certain equity investments for the promotion of business and strategic objectives and these investments may be in marketable equity securities or non-marketable equity securities. The Company accounts for its investments in entities that it does not have significant influence under the cost method. Investments in equity securities are carried at fair value if the fair value of the security is readily determinable. Equity investments carried at fair value are classified as long-term investments and included in "Other assets" in the Company's Consolidated Balance Sheet. Unrealized gains and losses, net of taxes, on the long-term investments are included in the Company's Consolidated Balance Sheet as a component of accumulated other comprehensive income (loss). Investments in equity securities that do not qualify for fair value accounting or equity method accounting are accounted for under the cost method. In accordance with the cost method, the Company's initial investment is recorded at cost and the Company reviews all of its cost method investments quarterly to determine if impairment indicators exist. Cost method investments are classified as long-term investments and included in "Other assets" in the Company's Consolidated Balance Sheet.

Variable Interest Entities

From time to time, the Company may enter into investments in entities that are considered variable interest entities under Accounting Standards Codification (ASC) Topic 810. If the Company is the primary beneficiary of a variable interest entity ("VIE"), it is required to consolidate it. To determine if the Company is the primary beneficiary of a VIE, the Company evaluates whether it has (1) the power to direct the activities that most significantly impact the VIE's economic performance, and (2) the obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE. The assessment of whether the Company is the primary beneficiary of its VIE requires significant assumptions and judgments. The Company has concluded that none of the Company's equity investments require consolidation as they are either not variable interest entities or, of the equity investments that are variable interest entities, the Company is not considered to be the primary beneficiary based on an assessment performed by management.

Concentrations of Credit Risk/Major Customers/Supplier Concentration

Financial instruments which subject the Company to concentrations of credit risk consist primarily of cash, cash equivalents, short-term investments and accounts receivable. Cash, cash equivalents and short-term investments are invested in short-term, highly liquid, investment-grade obligations of commercial or governmental issuers, in accordance with the Company's investment policy. The investment policy limits the amount of credit exposure to any one financial institution, commercial or governmental issuer. The Company's accounts receivable are derived from sales to cable, satellite, telco, and broadcast and media companies. The Company generally does not require collateral from its customers, and performs ongoing credit evaluations of its customers and provides for expected losses. The Company maintains an allowance for doubtful accounts based upon the expected collectability of its accounts receivable. No customers had a balance greater than 10% of the Company's net accounts receivable balance as of December 31, 2015 and 2014. In the years ended December 31, 2015, 2014 and 2013, sales to Comcast accounted for 12%, 16% and 12% of the Company's net revenue, respectively, and no other single customer accounts for more than 10% of total net revenue.

Certain of the components and subassemblies included in the Company's products are obtained from a single source or a limited group of suppliers. Although the Company seeks to reduce dependence on those sole source and limited source suppliers, the partial or complete loss of certain of these sources could have at least a temporary adverse effect on the Company's results of operations and damage customer relationships.

Revenue Recognition

The Company's principal sources of revenue are from the sale of hardware, software, hardware and software maintenance contracts, and end-to-end solutions, encompassing design, manufacture, test, integration and installation of products. The Company recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been provided, the sale price is fixed or determinable, and collectability is reasonably assured.

Revenue from the sale of hardware and software products is recognized when risk of loss and title have transferred. For most of the Company's product sales, these criteria are met at the time the product is shipped or delivery has occurred. Revenue from distributors and system integrators is recognized on delivery of the related products, provided all other revenue recognition criteria have been met. The Company's agreements with these distributors and system integrators have terms which are generally consistent with the standard terms and conditions for the sale of the Company's equipment to end users, and do not provide for product rotation or pricing allowances, as are typically found in agreements with stocking distributors. The Company accrues for sales returns and other allowances based on probable customer returns.

Deferred revenue includes billings in excess of revenue recognized, net of deferred cost of revenue, and invoiced amounts remain deferred until applicable revenue recognition criteria are met.

Shipping and handling costs incurred for inventory purchases and product shipments are recorded in cost of revenue in the Company's Consolidated Statements of Operations. Costs associated with services are generally recognized as incurred.

The Company recognizes revenue from the sale of hardware products and software bundled with hardware that is essential to the functionality of the hardware in accordance with applicable revenue recognition accounting guidance. For the sale of stand-alone software products, bundled with hardware but not essential to the functionality of the hardware, revenue is allocated between the hardware, including essential software and related elements, and the non-essential software and related elements. Revenue for the hardware and essential software elements are recognized under the relative allocation method. Revenue for the non-essential software and related elements are recognized under the residual method in accordance with software accounting guidance. Revenue associated with service and maintenance agreements is recognized on a straight-line basis over the period in which the services are performed, generally one year. The Company recognizes revenue associated with solution sales using the percentage of completion or completed contract methods of accounting. Further details of these accounting policies are described below.

Multiple Element Arrangements. The Company has revenue arrangements that include hardware and software essential to the hardware product's functionality, and non-essential software, services and support. For transactions originating or materially modified, beginning January 1, 2011, the Company has applied the accounting guidance that requires the Company to allocate revenue to all deliverables based on their relative selling prices. For transactions originating prior to January 1, 2011, the Company applied software revenue recognition accounting guidance, as described in the "Software" section below. The Company determines the relative selling prices by first considering vendor-specific objective evidence of fair value ("VSOE"), if it exists; otherwise third-party evidence ("TPE") of the selling price is used. If neither VSOE nor TPE exists for a deliverable, the Company uses a best estimate of the selling price ("BESP") for that deliverable. Once revenue is allocated to all deliverables based on their relative selling prices, revenue related to hardware elements (hardware, essential software and related services) are recognized using a relative selling price allocation and non-essential software and related services are recognized under the residual method.

Harmonic has established VSOE for certain elements of its arrangements based on either historical stand-alone sales to third parties or stated renewal rates for maintenance. The Company has VSOE of fair value for maintenance, training and certain professional services.

TPE is determined based on competitor prices for similar deliverables when sold separately. The Company is typically not able to determine TPE for competitors' products or services. Generally, the Company's go-to-market strategy differs from that of its competitors' and the Company's offerings contain a significant level of differentiation, such that the comparable pricing of products with similar functionality cannot be obtained. Furthermore, the Company is unable to reliably determine what competitor similar products' selling prices are on a stand-alone basis.

When the Company is unable to establish fair value of non-software deliverables using VSOE or TPE, the Company uses BESP in its allocation of arrangement consideration. The objective of using BESP is to determine the price at which the Company would transact a sale if the product or service were sold on a stand-alone basis. The Company determines BESP for a product or service by considering multiple factors, including, but not limited to, pricing practices, market conditions, competitive landscape, internal costs, geographies and gross margin. The determination of BESP is made through consultation with Company's management, taking into consideration the Company's go-to-market strategy.

Software. Sales of stand-alone software that are not considered essential to the functionality of the hardware continue to be subject to the software revenue recognition guidance.

In accordance with the software revenue recognition guidance, the Company applies the residual method to recognize revenue for the delivered elements in stand-alone software transactions. Under the residual method, the amount of revenue allocated to delivered elements equals the total arrangement consideration, less the aggregate fair value of any undelivered elements, typically maintenance, provided that vendor specific objective evidence ("VSOE") of fair value exists for all undelivered elements. VSOE of fair value is based on the price charged when the element is sold separately or, in the case of maintenance, substantive renewal rates for maintenance.

Solution Sales. Solution sales for the design, manufacture, test, integration and installation of products, including equipment acquired from third parties to be integrated with Harmonic's products, that are customized to meet the customer's specifications are accounted for in accordance with applicable guidance on accounting for performance of construction/production contracts. Accordingly, for each arrangement that the Company enters into that includes both products and services, the Company performs a detailed evaluation to determine whether the arrangement should be accounted for under guidance for construction/production contracts or, alternatively, for arrangements that do not involve significant production, modification or customization, under other applicable accounting guidance. The Company has a long-standing history of entering into contractual arrangements to deliver the solution sales described.

At the outset of each arrangement accounted for as a single arrangement, the Company develops a detailed project plan and associated labor hour estimates for each project. The Company believes that, based on its historical experience, it has the ability to make labor cost estimates that are sufficiently dependable to justify the use of the percentage-of-completion method of accounting. Under the percentage-of-completion method, revenue recognized reflects the portion of the anticipated contract revenue that has been earned, equal to the ratio of actual labor hours expended to total estimated labor hours to complete the project. Costs are recognized proportionally to the labor hours incurred. For contracts that include customized services for which labor costs are not reasonably estimable, the Company uses the completed contract method of accounting. Under the completed contract method, 100% of the contract's revenue and cost is recognized upon the completion of all services under the contract. If the estimated costs to complete a project exceed the total contract amount, indicating a loss, the entire anticipated loss is recognized.

Inventories

Inventories are stated at the lower of cost or market. Cost is computed using standard cost, which approximates actual cost, on a first-in, first-out basis. The cost of inventories is comprised of material, labor and manufacturing overhead. The Company's manufacturing overhead standards for product costs are calculated assuming full absorption of forecasted spending over projected volumes. The Company establishes provisions for excess and obsolete inventories to reduce such inventories to their estimated net realizable value after evaluation of historical sales, future demand and market conditions, expected product life cycles and current inventory levels. Such provisions are charged to cost of revenue in the Company's Consolidated Statements of Operations.

Capitalized Software Development Costs

Costs related to research and development are generally charged to expense as incurred. Capitalization of material software development costs begins when a product's technological feasibility has been established. To date, the time period between achieving technological feasibility, which the Company has defined as the establishment of a working model, which typically occurs when beta testing commences, and the general availability of such software has been short, and, as such, software development costs qualifying for capitalization have been insignificant.

The Company incurs costs associated with developing software for internal use and for which no plan exists to market the software externally. The Company capitalizes the costs as part of property and equipment and recognizes the associated depreciation over the software's estimated useful life of generally three years. Capitalized software costs for internal use have been insignificant in each of the periods presented.

Property and Equipment

Property and equipment are recorded at cost. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the assets. Estimated useful lives are five years for furniture and fixtures, three years for software developed for internal use and typically four years for machinery and equipment. Depreciation and amortization for leasehold improvements are computed using the shorter of the remaining useful lives of the assets, up to ten years, or the lease term of the respective assets.

Goodwill

Goodwill represents the difference between the purchase price and the estimated fair value of the identifiable assets acquired and liabilities assumed. The Company tests for goodwill impairment at the reporting unit level on an annual basis in

the fourth quarter of each of its fiscal years, and at any other time at which events occur or circumstances indicate that the carrying amount of goodwill may exceed its fair value. The Company uses a two-step process to determine the amount of goodwill impairment. The first step requires comparing the fair value of the reporting unit to its net book value, including goodwill. A potential impairment exists if the fair value of the reporting unit is lower than its net book value. The second step of the process, which is performed only if a potential impairment exists, involves determining the difference between the fair value of the reporting unit's net assets other than goodwill and the fair value of the reporting unit. If this difference is less than the net book value of goodwill, an impairment exists and is recorded.

In fiscal 2013, the Company performed goodwill impairment test as a single reporting unit. In fiscal 2014, due to a change in the Company's reporting structure, the goodwill impairment is tested at its two reporting units, which are the same as the operating segments (see Note 17, "Segment Information, Geographic Information and Customer Concentration" for additional information on operating segments). Goodwill is assigned to the reporting units using the relative fair values of the reporting units and the fair values of the reporting units were determined utilizing a blend of the income approach and the market approach. There was no impairment of goodwill resulting from the Company's fiscal 2015 annual impairment testing in the fourth quarter of 2015 (See Note 8, "Goodwill and Identified Intangible Assets" for additional information).

Long-lived Assets

Long-lived assets represent property and equipment and purchased intangible assets. Purchased intangible assets from business combinations and asset acquisitions include customer contracts, trademarks and trade names, and maintenance agreements and related relationships, the amortization of which is charged to general and administrative expenses, and core technology and developed technology, the amortization of which is charged to cost of revenue. The Company evaluates the recoverability of intangible assets and other long-lived assets when indicators of impairment are present. When impairment indicators are present, the Company evaluates the recoverability of intangible assets and other long-lived assets on the basis of undiscounted cash flows expected to result from the use of each asset group and its eventual disposition. If the undiscounted expected future cash flows are less than the carrying amount of the asset, an impairment loss is recognized in order to writedown the carrying value of the asset to its estimated fair market value.

In connection with restructuring actions initiated during 2014, the Company recorded a fixed assets impairment charge of $1.1 million in fiscal 2014 related to software development costs incurred for a discontinued project.

Foreign Currency

The functional currency of the Company's Israeli, Cayman and Swiss operations is the U.S. dollar. All other foreign subsidiaries use the respective local currency as the functional currency. When the local currency is the functional currency, gains and losses from translation of these foreign currency financial statements into U.S. dollars are recorded as a separate component of other comprehensive loss in stockholders' equity.

For subsidiaries where the functional currency is the U.S. dollar, monetary assets and liabilities denominated in currencies other than the U.S. dollar are remeasured into U.S. dollars using exchange rates prevailing on the balance sheet date. The remeasurement gains and losses are included in other income (expense), net in the Company's Consolidated Statements of Operations. The Company recorded remeasurement losses of $0.5 million, $0.4 million and $0.5 million for the years ended December 31, 2015, 2014 and 2013, respectively.

Derivative Instruments

The Company enters into derivative instruments, primarily foreign currency forward contracts, to minimize the short-term impact of foreign currency exchange rate fluctuations on certain foreign currency denominated assets and liabilities as well as certain foreign currencies denominated expenses. The Company does not enter into derivative instruments for trading purposes and these derivatives generally have maturities within twelve months.

The derivative instruments are recorded at fair value in prepaid expenses and other current assets or accrued liabilities in the Company's Consolidated Balance Sheet. For derivative instruments designated and qualifying as cash flow hedges of forecasted foreign currency denominated transactions expected to occur within twelve months, the effective portion of the gain or loss on these hedges is reported as a component of "Accumulated other comprehensive income (loss)" in stockholders' equity, and is reclassified into earnings when the hedged transaction affects earnings. If the transaction being hedged fails to occur, or if a portion of any derivative is (or becomes) ineffective, the gain or loss on the associated financial instrument is recorded immediately in earnings. For derivative instruments used to hedge existing foreign currency denominated assets or liabilities, the gains or losses on these hedges are recorded immediately in earnings to offset the changes in the fair value of the assets or liabilities being hedged.

Fair Value of Financial Instruments

The carrying value of the Company's financial instruments, including cash equivalents, restricted cash, short-term investments, accounts receivable, accounts payable and accrued liabilities, approximate fair value due to their short maturities.

Restructuring and Related Charges

The Company's restructuring charges consist primarily of employee severance, one-time termination benefits related to the reduction of its workforce, lease exit costs, and other costs. Liabilities for costs associated with a restructuring activity are recognized when the liability is incurred and are measured at fair value. One-time termination benefits are expensed at the date the entity notifies the employee, unless the employee must provide future service, in which case the benefits are expensed ratably over the future service period. Termination benefits are calculated based on regional benefit practices and local statutory requirements. Costs to terminate a lease before the end of its term are recognized when the entity terminates the contract in accordance with the contract terms. The Company determines the excess facilities accrual based on expected cash payments, under the applicable facility lease, reduced by any estimated sublease rental income for such facility. Other costs primarily consist of costs to write down the values of inventories and leasehold improvement write-down as a result of restructuring activities (see Note 11, "Restructuring and Asset Impairment Charges" for additional information).

Warranty

The Company accrues for estimated warranty costs at the time of revenue recognition and records such accrued liabilities as part of cost of revenue. Management periodically reviews its warranty liability and adjusts the accrued liability based on the terms of warranties provided to customers, historical and anticipated warranty claims experience, and estimates of the timing and cost of warranty claims.

Advertising Expenses

All advertising costs are expensed as incurred and included in "Selling, general and administrative expenses" in the Company's Consolidated Statements of Operations. Advertising expense was $1.4 million, $0.2 million and $0.4 million for the years ended December 31, 2015, 2014 and 2013, respectively.

Stock-based Compensation Expense

The Company measures and recognizes compensation expense for all stock-based compensation awards made to employees and directors, including stock options, restricted stock units and awards related to the Company's Employee Stock Purchase Plan ("ESPP"), based upon the grant-date fair value of those awards.

Applicable accounting guidance requires companies to estimate the fair value of stock-based compensation awards on the date of grant. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service period in the Company's Consolidated Statements of Operations.

The fair value of stock options is estimated at grant date using the Black-Scholes option pricing model. The Company's determination of fair value of stock options on the date of grant, using an option pricing model, is affected by the Company's stock price, as well as the assumptions regarding a number of highly complex and subjective variables. These variables include, but are not limited to, the Company's expected stock price volatility over the term of the awards and projected employee stock option exercise behaviors. The fair value of each restricted stock unit grant is based on the underlying value of the Company's common stock on the date of grant.

Income Taxes

In preparing the Company's financial statements, the Company estimates the income taxes for each of the jurisdictions in which the Company operates. This involves estimating the Company's actual current tax exposures and assessing temporary and permanent differences resulting from differing treatment of items, such as reserves and accruals, for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within the Company's Consolidated Balance Sheet.

The Company's income tax policy is to record the estimated future tax effects of temporary differences between the tax bases of assets and liabilities and amounts reported in the Company's accompanying Consolidated Balance Sheets, as well as operating loss and tax credit carryforwards. The Company follows the guidelines set forth in the applicable accounting guidance regarding the recoverability of any tax assets recorded on the Consolidated Balance Sheet and provides any necessary allowances as required. Determining necessary allowances requires the Company to make assessments about the timing of future events, including the probability of expected future taxable income and available tax planning opportunities. A history of operating losses in recent years has led to uncertainty with respect to our ability to realize certain of our net deferred tax assets, and as a result we applied full valuation allowance against our U.S. net deferred tax assets as of December 31, 2015. In the

event that actual results differ from these estimates or the Company adjusts these estimates in future periods, the Company's operating results and financial position could be materially affected.

The Company is subject to examination of its income tax returns by various tax authorities on a periodic basis. The Company regularly assesses the likelihood of adverse outcomes resulting from such examinations to determine the adequacy of its provision for income taxes. The Company has applied the provisions of the applicable accounting guidance on accounting for uncertainty in income taxes, which requires application of a more-likely-than-not threshold to the recognition and de-recognition of uncertain tax positions. If the recognition threshold is met, the applicable accounting guidance permits the Company to recognize a tax benefit measured at the largest amount of tax benefit that, in the Company's judgment, is more than 50% likely to be realized upon settlement. It further requires that a change in judgment related to the expected ultimate resolution of uncertain tax positions be recognized in earnings in the period of such change.

The Company files annual income tax returns in multiple taxing jurisdictions around the world. A number of years may elapse before an uncertain tax position is audited and finally resolved. While it is often difficult to predict the final outcome or the timing of resolution of any particular uncertain tax position, the Company believes that its reserves for income taxes reflect the most likely outcome. The Company adjusts these reserves and penalties, as well as the related interest, in light of changing facts and circumstances. Changes in the Company's assessment of its uncertain tax positions or settlement of any particular position could materially and adversely impact the Company's income tax rate, operating results, financial position and cash flows.

Segment Reporting

Operating segments are defined as components of an enterprise that engage in business activities for which separate financial information is available and is evaluated by the Chief Operating Decision Maker ("CODM"), which for the Company is its Chief Executive Officer, in deciding how to allocate resources and assess performance. Prior to the fourth quarter of 2014, the Company operated its business in one reportable segment. With effect from the fourth quarter of 2014, the Company changed its operating segments to align with how the CODM evaluates the financial information used to allocate resources and assess performance of the Company. The new reporting structure consists of two operating segments: Video and Cable Edge. All prior period segment information presented has been conformed to the new operating segments.

Comprehensive Income (Loss)

Comprehensive income (loss) includes net income (loss) and other comprehensive income (loss). Other comprehensive income (loss) includes cumulative translation adjustments, unrealized gains and losses on certain foreign currency forward contracts that qualify as cash flow hedges and available-for-sale securities.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued new authoritative guidance for revenue recognition, requiring an entity to recognize the amount of revenue that reflects the consideration to which it expects to be entitled for the transfer of promised goods or services to customers. The updated standard will replace most existing revenue recognition guidance in U.S. GAAP when it becomes effective and permits the use of either the retrospective or cumulative effect transition method. The original effective date for this new standard would have required the Company to adopt beginning in its first quarter of 2018. In August 2015, the FASB issued an accounting standard update for the deferral of the effective date by one year and permits early adoption, but not before the original effective date. Accordingly, the Company may adopt the standard in either its first quarter of 2018 or 2019. The new revenue standard may be applied retrospectively to each prior period presented or retrospectively with the cumulative effect recognized as of the date of adoption. The Company is currently evaluating the timing of its adoption and the impact of adopting the new revenue standard on its consolidated financial statements.

In November 2014, the FASB issued an accounting standard update for determining when separation of certain embedded derivative features in a hybrid financial instrument is required. An entity will continue to evaluate whether the economic characteristics and risks of the embedded derivative feature are clearly and closely related to those of the host contract, among other relevant criteria. The amendments clarify how current GAAP should be interpreted in evaluating the economic characteristics and risks of a host contract in a hybrid financial instrument that is issued in the form of a share. The accounting standard update will be effective for the Company beginning in the first quarter of fiscal 2016 and early adoption is permitted. The adoption of this accounting standard update will not impact the Company's financial position, results of operations or cash flows.

In February 2015, the FASB issued an accounting standard update that changes the analysis that a reporting entity must perform to determine whether it should consolidate certain types of legal entities. This accounting standard update will be

effective for the Company beginning in the first quarter of fiscal 2016 and early adoption is permitted. The adoption of this new guidance is not expected to have a material impact on the Company's consolidated financial statements.

In April 2015, the FASB issued an accounting standard update that requires debt issuance costs to be presented as a direct deduction from the carrying amount of the related debt liability, consistent with the presentation of debt discounts. Prior to this accounting update, debt issuance costs were required to be presented as deferred charge assets, separate from the related debt liability. This accounting standard update does not change the recognition and measurement requirements for debt issuance costs. The Company early-adopted this accounting standard update as of the end of its fiscal 2015 in connection with the convertible senior notes issued in December 2015 (see Note 12, "Convertible Notes and Credit Facilities"), resulting in the classification of $3.2 million of unamortized debt issuance costs as a deduction from long-term liability on its Consolidated Balance Sheet at December 31, 2015. Other than this transaction, the adoption of this accounting standard update did not have an impact on the Company's consolidated financial statements.

In July 2015, the FASB issued an accounting standard update that requires inventory to be measured at the lower of cost and net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. This accounting standard update will be effective for the Company beginning in the first quarter of fiscal 2017 and early adoption is permitted. The Company is currently evaluating the impact of this accounting standard update on its consolidated financial statements.

In November 2015, the FASB issued an accounting standard update that all deferred tax assets and liabilities, along with any related valuation allowance, be classified as non-current on the balance sheet. The accounting standard update will be effective for the Company beginning in the first quarter of fiscal 2017 and early adoption is permitted. The Company early-adopted prospectively this accounting standard update as of the end of its fiscal 2015, resulting in $15.9 million of net deferred tax assets, along with its related valuation allowance, being classified as non-current on the Consolidated Balance Sheet as of December 31, 2015. Other than this reclassification, the adoption of this accounting standard update did not have an impact on the Company's consolidated financial statements.

In January 2016, the FASB issued an accounting standard update which requires equity investments to be measured at fair value with changes in fair value recognized in net income and simplifies the impairment assessment of equity investments without readily determinable fair values by requiring a qualitative assessment to identify impairment. The accounting standard update also updates certain presentation and disclosure requirements. This accounting standard update will be effective for the Company beginning in the first quarter of fiscal 2018 and early adoption is permitted. The Company is currently evaluating the impact of this accounting standard update on its consolidated financial statements.

In February 2016, the FASB amends the existing accounting standard for lease accounting. Under this guidance, lessees and lessors should apply a "right-of-use" model in accounting for all leases (including subleases) and eliminate the concept of operating leases and off-balance sheet leases. This new leases standard requires a modified retrospective transition approach for all leases existing at, or entered into after, the date of initial application, with an option to use certain transition relief. The new standard will be effective for the Company beginning in the first quarter of fiscal 2019 and early adoption is permitted. The Company is currently evaluating the methods and impact of adopting the new leases standard on its consolidated financial statements.

NOTE 3: DISCONTINUED OPERATIONS

In February 2013, the Company entered into an Asset Purchase Agreement with Aurora pursuant to which the Company agreed to sell its cable access HFC business for $46 million in cash. On March 5, 2013, the sale transaction closed and the Company received gross proceeds of $46 million from the sale and recorded a net gain of $14.7 million in connection with the sale. The gain was included in income from discontinued operations, net of tax in the Consolidated Statement of Operations for the year ended December 31, 2013.

In accordance with ASC 205 "Presentation of financial statements – Discontinued Operations", a business is classified as a discontinued operation when: (i) the operations and cash flows of the business can be clearly distinguished and have been or will be eliminated from our ongoing operations; (ii) the business has either been disposed of or is classified as held for sale; and (iii) the Company will not have any significant continuing involvement in the operations of the business after the disposal transactions.

In March 2013, the Company entered into a transition services agreement ('TSA") with Aurora to provide contract manufacturing and other various support, including providing order fulfillment, taking warranty calls, attending to product returns from customers, providing cost accounting analysis, receiving payments from customers and remitting such payments to Aurora. The TSA fees were a fixed amount per month and were determined based on the Company's estimated cost of

delivering the transition services. In addition, in April 2013, the Company and Aurora signed a sublease agreement for the Company's Milpitas warehouse for the remaining period of the lease.

The Company determined that the cash flows generated from these transactions were both insignificant and were considered indirect cash flows. As a result, the sale of the cable access HFC business was appropriately presented as discontinued operations. The TSA ended in October 2013 and the billing to Aurora was recorded in the Condensed Consolidated Statements of Operations under income from continuing operations as an offset to the expenses incurred to deliver the transition services. The table below provides details on the income statement caption under which the TSA billing was recorded (in thousands):

	Year ended December 31, 2013
Product cost of revenue	$ 577
Research and development	21
Selling, general and administrative	379
Total TSA billing to Aurora	$ 977

The Company recorded a gain of $14.7 million for the year ended December 31, 2013, in connection with the sale of the cable access HFC business, calculated as follows (in thousands):

Gross Proceeds		$ 46,000
Less : Carrying value of net assets		
Inventories, net	$ 10,579	
Prepaid expenses and other current assets	612	
Property and equipment, net	1,194	
Goodwill de-recognized	14,547	
Deferred revenue	(4,499)	
Accrued liabilities	(939)	
Total net assets sold and de-recognized		$ 21,494
Less : Selling cost		2,485
Less : Tax effect		7,358
Gain on disposal, net of tax		$ 14,663

Upon the sale of the cable access HFC business, approximately $14.5 million of the carrying value of goodwill was allocated to the cable access HFC business based on the relative fair value of the cable access HFC business to the fair value of the Company. The Company had one reporting unit in 2013. The remaining carrying value of goodwill was tested for impairment, and the Company determined that goodwill was not impaired as of March 29, 2013.

The results of operations associated with the cable access HFC business are presented as discontinued operations in the Company's Consolidated Statements of Operations for all periods presented. There were no operating activities associated with the cable access HFC business after December 31, 2013. Revenue and the components of net income related to the discontinued operations for the year ended December 31, 2013 was as follows (in thousands):

	Year ended December 31 2013
Revenue	$ 9,717
Operating income	$ 539
Less : Benefit from income taxes	(236)
Add : Gain on disposal, net of tax	14,663
Income from discontinued operations, net of taxes	$ 15,438

NOTE 4: SHORT-TERM INVESTMENTS

The following table summarizes the Company's short-term investments (in thousands):

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
As of December 31, 2015				
Corporate bonds	$ 25,557	$ —	$ (52)	$ 25,505
Commercial paper	1,099	—	—	1,099
Total short-term investments	$ 26,656	$ —	$ (52)	$ 26,604
As of December 31, 2014				
State, municipal and local government agencies bonds	$ 13,946	$ 16	$ (1)	$ 13,961
Corporate bonds	17,899	3	(16)	17,886
Total short-term investments	$ 31,845	$ 19	$ (17)	$ 31,847

The following table summarizes the maturities of the Company's short-term investments (in thousands):

	December 31,	
	2015	2014
Less than one year	$ 19,642	$ 30,946
Due in 1 - 2 years	6,962	901
Total short-term investments	$ 26,604	$ 31,847

Short-term investments are used to fund the Company's current operations. In the event the Company needs or desires to access funds from the short-term investments that it holds, it is possible that the Company may not be able to do so due to market conditions. If a buyer is found, but is unwilling to purchase the investments at par or the Company's cost, it may incur a loss. Further, rating downgrades of the security issuer or the third parties insuring such investments may require the Company to adjust the carrying value of these investments through an impairment charge. The Company's inability to sell all or some of the Company's short-term investments at par or the Company's cost, or rating downgrades of issuers or insurers of these securities, could adversely affect the Company's results of operations or financial condition.

For the years ended December 31, 2015, 2014 and 2013, realized gains and realized losses from the sale of short-term investments were not material.

At December 31, 2015 and 2014, $5.4 million and $8.6 million, respectively, of investments in equity securities of other privately and publicly held companies are considered as long-term investments and are included in "other assets" in the Consolidated Balance sheet (See Note 5, "Investments in Other Equity Securities" for additional information).

Impairment of Short-term Investments

The Company monitors its investment portfolio for impairment on a periodic basis. In the event that the carrying value of an investment exceeds its fair value and the decline in value is determined to be other-than-temporary, an impairment charge is recorded and a new cost basis for the investment is established. A decline of fair value below amortized costs of debt securities is considered other-than temporary if the Company has the intent to sell the security or it is more likely than not that the Company will be required to sell the security before recovery of the entire amortized cost basis. At the present time, the Company does not intend to sell its investments that have unrealized losses in accumulated other comprehensive loss. In addition, the Company does not believe that it is more likely than not that it will be required to sell its investments that have unrealized losses in accumulated other comprehensive loss before the Company recovers the principal amounts invested. The Company believes that the unrealized losses are temporary and do not require an other-than-temporary impairment, based on its evaluation of available evidence as of December 31, 2015.

As of December 31, 2015, there were no individual available-for-sale securities in a material unrealized loss position and the amount of unrealized losses on the total investment balance was insignificant.

NOTE 5: INVESTMENTS IN OTHER EQUITY SECURITIES

From time to time, the Company may acquire certain equity investments for the promotion of business objectives and these investments are classified as long-term investments and included in "Other assets" in the Consolidated Balance Sheet.

On September 2, 2014, the Company acquired a 3.3% interest in Vislink plc ("Vislink"), a U.K. public company listed on the AIM exchange, for $3.3 million, and also made a $3.3 million prepayment to Vislink for future software license purchases. As of December 31, 2015, there was no outstanding balance in the prepayment to Vislink for future software license purchase. The investment in Vislink is being accounted for as a cost method investment as the Company does not have significant influence over the operational and financial policies of Vislink. Since the Vislink investment is also an available-for-sale security, its value is marked to market for the difference in fair value at period end. The carrying value of Vislink was $1.8 million and $2.6 million as of December 31, 2015 and December 31, 2014, respectively, and Vislink's accumulated unrealized loss, net of taxes was $1.5 million and $0.7 million as of December 31, 2015 and December 31, 2014, respectively. The accumulated unrealized loss is included in the Consolidated Balance Sheet as a component of "Accumulated other comprehensive income (loss)".

The Company assessed this available-for-sale investment that was in a gross unrealized loss position on an individual basis to determine if the decline in fair value was other than temporary. The assessment as to the nature of a decline in fair value is based on, among other things, the length of time and the extent to which the market value has been less than the Company's cost basis; the financial condition and near-term prospects of the investment; and the Company's intent and ability to retain the investment for a period of time sufficient to allow for any anticipated recovery in market value. As a result of these assessments, it is determined that the decline in fair value of Vislink was not other than temporary and did not record any impairment charges as of December 31, 2015. However, sustained depression of Vislink's stock price coupled with deterioration in financial condition and near term prospects of the investment may lead to an other-than-temporary impairment assessment in 2016. The Company's maximum exposure to loss from the Vislink investment as of December 31, 2015 was limited to its initial investment cost of $3.3 million.

Unconsolidated Variable Interest Entities ("VIE")

VJU

On September 26, 2014, the Company acquired a 19.8% interest in VJU ITV Development GmbH ("VJU"), a software company based in Austria, for $2.5 million. Since VJU's equity is deemed not sufficient to permit it to finance its activities without additional support from its shareholders, VJU is considered a variable interest entity ("VIE"). The Company determined that it is not the primary beneficiary of VJU because its financial interest in VJU's equity and its research and development agreement with VJU do not empower the Company to direct VJU's activities that will most significantly impact VJU's economic performance. VJU is accounted for as a cost method investment as the Company does not have significant influence over the operational and financial policies of VJU.

The Company attended a VJU board meeting on March 5, 2015 as an observer. At that meeting, the Company was made aware of significant decreases in VJU's business prospects, VJU's existing working capital and prospects for additional funding, compared to the prior information the Company had received from VJU. Based on the Company's assessment, the Company determined that its investment in VJU was impaired on an other-than-temporary basis. Factors considered included the severity of the impairment and recent events specific to VJU. Based on the Company's assessment of VJU's expected cash flows, the entire investment is expected to be non-recoverable. As a result, the Company recorded an impairment charge of $2.5 million in the first quarter of 2015. The Company's impairment loss in VJU is limited to its initial cost of investment of $2.5 million as well as the $0.1 million research and development cost expensed in September 2014.

At VJU's shareholders meeting held on October 15, 2015, additional contributions by existing shareholders were approved. The Company did not provide additional contributions to VJU, and as a result, the Company's equity interest in VJU decreased from to 19.8% to 9.9%.

EDC

On October 22, 2014, the Company acquired an 18.4% interest in Encoding.com, Inc. ("EDC"), a video transcoding service company headquartered in San Francisco, California, for $3.5 million by subscribing to EDC's Series B preferred stock. Since EDC's equity is deemed not sufficient to permit it to finance its activities without additional support from its shareholders, EDC is considered a VIE. The Company determined that it is not the primary beneficiary of EDC because its financial interest in EDC's equity does not empower the Company to direct EDC's activities that will most significantly impact EDC's economic performance. In addition, the Company determined that its investment in EDC's Series B preferred stock does not have the risk and reward characteristics that are substantially similar to EDC's common stock. Therefore, Harmonic does not hold an investment in EDC's common stock or in-substance common stock. According to the applicable accounting guidance, EDC investment is accounted for as a cost-method investment and as of December 31, 2015 and December 31, 2014, the carrying value of EDC was $3.6 million and $3.5 million, respectively.

The following table presents the carrying values and maximum exposure of the unconsolidated VIEs as of December 31, 2015 (in thousands):

	Carrying Value	Maximum exposure to loss[1]
VJU	$ —	$ —
EDC [2]	3,593	3,593
Total	$ 3,593	$ 3,593

(1) The Company did not provide financial support to any of its unconsolidated VIEs during the year ended December 31, 2015. As of December 31, 2015, there were no explicit arrangements or implicit variable interests that could require the Company to provide financial support to any of its unconsolidated VIEs.

(2) The Company's maximum exposure to loss with respect to EDC as of December 31, 2015 was limited to the investment cost of $3.6 million, including $0.1 million of transaction costs.

Each reporting period, the Company reviews all of its unconsolidated VIE investments to determine whether there are any reconsideration events that may result in the Company being a primary beneficiary of the unconsolidated VIE which would then require the Company to consolidate the VIE. The Company also reviews all its cost-method investments at each reporting period to determine whether a significant event of change in circumstances has occurred that may have an adverse effect on the fair value of each investment.

NOTE 6: DERIVATIVES AND HEDGING ACTIVITIES

The Company uses forward contracts, to manage exposures to foreign currency exchange rates. The Company's primary objective in holding derivative instruments is to reduce the volatility of earnings and cash flows associated with fluctuations in foreign currency exchange rates and the Company does not use derivative instruments for trading purposes. The use of derivative instruments expose the Company to credit risk to the extent that the counterparties may be unable to meet their contractual obligations, as such, the potential risk of loss with any one counterparty is closely monitored by the Company.

Derivatives Designated as Hedging Instruments (Cash Flow Hedges)

Beginning in December 2014, the Company entered into forward currency contracts to hedge forecasted operating expenses and service costs related to employee salaries and benefits denominated in Israeli shekels ("ILS") for its subsidiaries in Israel. These ILS forward contacts mature generally within twelve months and are designated as cash flow hedges. For derivatives that are designated as hedges of forecasted foreign currency denominated operating expenses and service costs, the Company assesses effectiveness based on changes in spot currency exchange rates. Changes in spot rates on the derivative are recorded as a component of "Accumulated other comprehensive income (loss)" ("AOCI") in the Consolidated Balance Sheet until such time as the hedged transaction impacts earnings. The change in fair value of the forward points, which reflects the interest rate differential between the two countries on the derivative, is excluded from the effectiveness assessment. Gains or losses on the derivative representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current earnings.

Derivatives Not Designated as Hedging Instruments (Balance Sheet Hedges)

Balance sheet hedges consist of foreign currency forward contracts, mature generally within three months, are carried at fair value and they are used to minimize the short-term impact of foreign currency exchange rate fluctuation on cash and certain trade and inter-company receivables and payables. Changes in the fair value of these foreign currency forward contracts are recognized in "Other income (expense), net" in the Consolidated Statement of Operations and are largely offset by the changes in the fair value of the assets or liabilities being hedged.

The locations and amounts of designated and non-designated derivative instruments' gains and losses reported in the Company's Consolidated Statements of Operations were as follows (in thousands):

	Financial Statement Location	Years ended December 31, 2015	2014	2013
Derivatives designated as hedging instruments:				
Gains (losses) in AOCI on derivatives (effective portion)	AOCI	$ (133)	$ 311	$ —
Gains reclassified from AOCI into income (effective portion)	Cost of Revenue	$ 59		
	Operating Expense	365		
	Total	$ 424	$ —	$ —
Gains (losses) recognized in income on derivatives (amount excluded from effectiveness testing)	Other income (expense), net	$ (87)	$ 18	$ —
Derivatives not designated as hedging instruments:				
Gains (losses) recognized in income	Other income (expense), net	$ 344	$ (72)	$ 596

The Company anticipates the AOCI balance of $133,000 at December 31, 2015, relating to net unrealized losses from cash flow hedges, will be reclassified to earnings within the next twelve months.

The U.S. dollar equivalent of all outstanding notional amounts of foreign currency forward contracts are summarized as follows (in thousands):

	December 31, 2015	2014
Derivatives designated as cash flow hedges:		
Purchase	$ 12,984	$ 16,903
Derivatives not designated as hedging instruments:		
Purchase	$ 6,942	$ 1,043
Sell	$ 11,332	$ 4,925

The locations and fair value amounts of the Company's derivative instruments reported in its Consolidated Balance Sheets are as follows (in thousands):

		Asset Derivatives			Asset Liabilities	
	Balance Sheet Location	December 31, 2015	December 31, 2014	Balance Sheet Location	December 31, 2015	December 31, 2014
Derivatives designated as hedging instruments:						
Foreign currency contracts	Prepaid expenses and other current assets	$ 13	$ 329	Accrued Liabilities	$ 281	$ —
		$ 13	$ 329		$ 281	$ —
Derivatives not designated as hedging instruments:						
Foreign currency contracts	Prepaid expenses and other current assets	$ 100	$ 12	Accrued Liabilities	$ 90	$ 7
		$ 100	$ 12		$ 90	$ 7
Total derivatives		$ 113	$ 341		$ 371	$ 7

Offsetting of Derivative Assets and Liabilities

The Company recognizes all derivative instruments on a gross basis in the Consolidated Balance Sheets. However, the arrangements with its counterparties allows for net settlement, which are designed to reduce credit risk by permitting net settlement with the same counterparty. As of December 31, 2015, information related to the offsetting arrangements was as follows (in thousands):

	Gross Amounts of Derivatives	Gross Amounts of Derivatives Offset in the Consolidated Balance Sheets	Net Amounts of Derivatives Presented in the Consolidated Balance Sheets	Gross Amounts of Derivatives Not Offset in the Consolidated Balance Sheets		Net Amount
				Financial Instrument	Cash Collateral Pledged	
Derivative Assets	$ 113	—	$ 113	$ (113)	—	$ —
Derivative Liabilities	$ 371	—	$ 371	$ (113)	—	$ 258

As of December 31, 2014, there was no potential effect of rights of offset associated with the outstanding foreign currency forward contracts that would result in a net derivative asset or net derivative liability.

In connection with the foreign currency derivatives entered in Israel, the Company's subsidiaries in Israel are required to maintain a compensating balance with their bank at the end of each month. These compensating balance arrangements do not legally restrict the use of cash and as of December 31, 2015, the total compensating balance maintained was $2.5 million.

NOTE 7: FAIR VALUE MEASUREMENTS

The applicable accounting guidance establishes a framework for measuring fair value and requires disclosure about the fair value measurements of assets and liabilities. This guidance requires the Company to classify and disclose assets and liabilities measured at fair value on a recurring basis, as well as fair value measurements of assets and liabilities measured on a nonrecurring basis in periods subsequent to initial measurement, in a three-tier fair value hierarchy as described below.

The guidance defines fair value as the exchange price that would be received for an asset or paid to transfer a liability, in the principal or most advantageous market for the asset or liability, in an orderly transaction between market participants on the measurement date.

Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The guidance describes three levels of inputs that may be used to measure fair value:

- Level 1 — Observable inputs that reflect quoted prices for identical assets or liabilities in active markets.
- Level 2 — Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. The Company primarily uses broker quotes for valuation of its short-term investments. The forward exchange contracts are classified as Level 2 because they are valued using quoted market prices and other observable data for similar instruments in an active market.
- Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The Company uses the market approach to measure fair value for its financial assets and liabilities. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities. The fair value of the Company's convertible notes is influenced by interest rates, the Company's stock price and stock price volatility. The estimated fair value of the Company's convertible notes based on a market approach was approximately $123.1 million as of December 31, 2015, and represents a Level 2 valuation. (See Note 12, "Convertible Notes and Credit Facilities-4.0% Convertible Senior Notes" for additional information on the convertible notes.)

During the years ended December 31, 2015, 2014 and 2013 there were no nonrecurring fair value measurements of assets and liabilities subsequent to initial recognition.

The following table sets forth the fair value of the Company's financial assets and liabilities measured at fair value based on the three-tier fair value hierarchy (in thousands):

	Level 1	Level 2	Level 3	Total
As of December 31, 2015				
Cash equivalents				
Money market funds	$ 53,434	$ —	$ —	$ 53,434
U.S. Treasury bills	24,998	—	—	24,998
Short-term investments				
Corporate bonds	—	25,505	—	25,505
Commercial paper	—	1,099	—	1,099
Prepaids and other current assets				
Time deposit pledged for credit card facility		580		580
Derivative assets	—	113	—	113
Other assets				
Long-term investment	1,840	—	—	1,840
Total assets measured and recorded at fair value	$ 80,272	$ 27,297	$ —	$ 107,569
Accrued liabilities				
Derivative liabilities	$ —	$ 371	$ —	$ 371
Total liabilities measured and recorded at fair value	$ —	$ 371	$ —	$ 371

	Level 1	Level 2	Level 3	Total
As of December 31, 2014				
Cash equivalents				
Money market funds	$ 23,121	$ —	$ —	$ 23,121
Short-term investments				
State, municipal and local government agencies bonds	—	13,961	—	13,961
Corporate bonds	—	17,886	—	17,886
Prepaids and other current assets				
Derivative assets	—	341	—	341
Other assets				
Long-term investment	2,606	—	—	2,606
Total assets measured and recorded at fair value	$ 25,727	$ 32,188	$ —	$ 57,915
Accrued liabilities				
Derivative liabilities	$ —	$ 7	$ —	$ 7
Total liabilities measured and recorded at fair value	$ —	$ 7	$ —	$ 7

NOTE 8: GOODWILL AND IDENTIFIED INTANGIBLE ASSETS

Goodwill

Goodwill represents the difference between the purchase price and the estimated fair value of the identifiable assets acquired and liabilities assumed. The Company tests for goodwill impairment at the reporting unit level on an annual basis, or more frequently if events or changes in circumstances indicate that the asset is more likely than not impaired. The Company's annual goodwill impairment test is performed in the fiscal fourth quarter, with a testing date at the end of fiscal October.

Prior to the fourth quarter of 2014, the Company operated its business in one reportable segment. Effective in fourth quarter of 2014, the Company changed its operating segments to align with how the Company's Chief Operating Decision Maker evaluates the financial information used to allocate resources and assess performance of the Company. The new reporting structure consists of two operating segments: Video and Cable Edge. The following table presents goodwill by reportable segments (in thousands):

	Video		Cable Edge		Total	
Balance as of December 31, 2014	$	136,975	$	60,909	$	197,884
Foreign currency translation adjustment		(71)		(32)		(103)
Balance as of December 31, 2015	$	136,904	$	60,877	$	197,781

The Company performs its annual goodwill impairment review of its two reporting units, which are the same as its operating segments, during the fourth fiscal quarter of 2015. It is concluded that goodwill was not impaired as the Video and Cable Edge reporting units had estimated fair values in excess of their carrying value by approximately 87% and 42%, respectively. In addition, the Company has not recorded any impairment charges related to goodwill for any prior periods. Because the Cable Edge reporting unit has an estimated fair value that is not substantially in excess of its carrying value, the Company will continue to monitor this reporting unit for risk of impairment in future periods.

The Company's market capitalization has declined so far in 2016. A significant decline in a company's stock price may suggest that an adverse change in the business climate may have caused the fair value of one or more reporting units to fall below their carrying value. Significant judgment has been applied to determine whether stock price declines are a short-term swing or a long-term trend. The Company believes that the decline in its stock price will not be sustained as it only fluctuated below the 2015 level for a short period. Additionally, the Company believes that the fluctuation in market capitalization is driven by general market movement and not company specific factors. The Company believes that the fair value established during the 2015 annual goodwill impairment testing for its Video and Cable Edge reporting units were reasonable and no triggering event subsequent to the 2015 annual assessment exists. However, a sustained decline in the Company stock price may lead to a triggering event for goodwill impairment in 2016.

Application of the goodwill impairment test requires judgment, including the identification of reporting units, assigning assets and liabilities to reporting units, assigning goodwill to reporting units, and determining the fair value of each reporting unit. Significant judgments required to estimate the fair value of reporting units include estimating future cash flows and determining appropriate discount rates, growth rates, an appropriate control premium and other assumptions. Changes in these estimates and assumptions could materially affect the determination of fair value for each reporting unit which could trigger impairment. If the Company's assumptions and related estimates change in the future, or if the Company's reporting structure changes or other events and circumstances change (e.g. such as a sustained decrease in the Company's stock price), the Company may be required to record impairment charges in future periods. Any impairment charges that the Company may take in the future could be material to its results of operations and financial condition.

Identified Intangible Assets

The following is a summary of identified intangible assets (in thousands):

		December 31, 2015						December 31, 2014					
	Range of Useful Lives	Gross Carrying Amount		Accumulated Amortization		Net Carrying Amount		Gross Carrying Amount		Accumulated Amortization		Net Carrying Amount	
Identifiable intangibles:													
Developed core technology	4-6 years	$	10,987	$	(10,987)	$	—	$	136,145	$	(135,426)	$	719
Customer relationships/contracts	5-6 years		29,200		(25,752)		3,448		67,098		(58,784)		8,314
Trademarks and tradenames	4-5 years		—		—		—		11,361		(11,361)		—
Maintenance agreements and related relationships	6-7 years		5,500		(4,851)		649		7,100		(5,534)		1,566
Total identifiable intangibles		$	45,687	$	(41,590)	$	4,097	$	221,704	$	(211,105)	$	10,599

As of December 31, 2015, certain fully amortized intangible assets have been removed from both the gross and accumulated amortization amounts. The balance of intangibles, net of $4.1 million at December 31, 2015 will be fully amortized in 2016 and recorded in operating expenses.

Amortization expense for the identifiable purchased intangible assets for the years ended December 31, 2015, 2014 and 2013 was allocated as follows (in thousands):

	December 31,		
	2015	2014	2013
Included in cost of revenue	$ 719	$ 13,745	$ 19,233
Included in operating expenses	5,783	6,775	8,096
Total amortization expense	$ 6,502	$ 20,520	$ 27,329

NOTE 9: ACCOUNTS RECEIVABLE

Accounts receivable, net of allowances, consisted of the following (in thousands):

	December 31,	
	2015	2014
Accounts receivable, net:		
Accounts receivable	$ 73,855	$ 81,201
Less: allowance for doubtful accounts and sales returns	(4,340)	(7,057)
Total	$ 69,515	$ 74,144

Trade accounts receivable are recorded at invoiced amounts and do not bear interest. The Company generally does not require collateral and performs ongoing credit evaluations of its customers and provides for expected losses. The Company maintains an allowance for doubtful accounts based upon the expected collectability of its accounts receivable. The expectation of collectability is based on the Company's review of credit profiles of customers, contractual terms and conditions, current economic trends and historical payment experience.

The following is a summary of activity in allowances for doubtful accounts and sales returns for the three years ended December 31, 2015, 2014 and 2013 (in thousands):

	Balance at Beginning of Period	Charges to Revenue	Charges (Credits) to Expense	Additions to (Deductions from) Reserves	Balance at End of Period
Year ended December 31,					
2015	$ 7,057	$ 1,826	$ 208	$ (4,751)	$ 4,340
2014	$ 8,214	$ 2,181	$ (238)	$ (3,100)	$ 7,057
2013	$ 9,595	$ 537	$ 423	$ (2,341)	$ 8,214

NOTE 10: CERTAIN BALANCE SHEET COMPONENTS

The following tables provide details of selected balance sheet components (in thousands):

	December 31,	
	2015	2014
Prepaid expenses and other current assets:		
Prepaid inventories to contract manufacturer (1)	$ 8,500	$ —
Prepaid software license to Vislink (2)	—	1,233
Other prepayments	8,736	9,713
Deferred cost of revenue	4,601	2,524
Income tax receivable	1,770	2,316
Restricted cash (3)	1,093	—
Other	303	1,753
Total	$ 25,003	$ 17,539

(1) From time to time, the Company makes advance payment to a supplier for future inventory in order to secure more favorable pricing. The Company anticipates that this amount will be offset in the first quarter of 2017 against the accounts payable owed to this supplier.

(2) The prepaid inventories were related to prepayment for software licenses made to Vislink (see Note 5, “Investments in Other Equity Securities” for additional information on Vislink).

(3) The restricted cash balances are held as cash collateral security for certain bank guarantees. These restricted funds are invested in bank deposits and cannot be withdrawn from the Company’s accounts without the prior written consent of the applicable secured party.

	December 31,	
	2015	2014
Inventories:		
Raw materials	$ 5,421	$ 1,422
Work-in-process	1,950	1,255
Finished goods	31,448	30,070
Total	$ 38,819	$ 32,747

	December 31,	
	2015	2014
Property and equipment, net:		
Furniture and fixtures	$ 7,808	$ 7,691
Machinery and equipment	93,010	86,766
Capitalized software	29,391	29,265
Leasehold improvements	10,000	8,140
Property and equipment, gross	140,209	131,862
Less: accumulated depreciation and amortization	(113,197)	(104,641)
Total	$ 27,012	$ 27,221

	December 31,	
	2015	2014
Accrued liabilities:		
Accrued compensation	$ 4,688	$ 6,655
Accrued incentive compensation	3,476	5,125
Accrued warranty	3,913	4,242
Other	19,277	19,096
Total	$ 31,354	$ 35,118

	December 31,	
	2015	2014
Other non-current Liabilities:		
Deferred rent, long-term	$ 6,340	$ 7,501
Deferred revenue, long-term	3,093	2,890
Other	294	320
Total	$ 9,727	$ 10,711

NOTE 11: RESTRUCTURING AND ASSET IMPAIRMENT CHARGES

The Company implemented several restructuring plans in the past few years and recorded restructuring and asset impairment charges of $1.5 million, $3.1 million and $2.2 million for the years ended December 31, 2015, 2014 and 2013,

respectively. The goal of these plans was to bring its operational expenses to appropriate levels relative to its net revenues, while simultaneously implementing extensive company-wide expense control programs.

The restructuring charges of $1.5 million in 2015 were primarily related to the 2015 restructuring plan implemented during fourth quarter of 2014. Of the $3.1 million restructuring charges recorded in 2014, $2.2 million was recorded in the fourth quarter of 2014 related to the 2015 restructuring plan and the remaining $0.9 million, as well as the restructuring charges of $2.2 million recorded in 2013, were related to restructuring plan implemented in 2013.

The Company accounts for its restructuring plans under the authoritative guidance for exit or disposal activities. The restructuring and asset impairment charges are included in “Product cost of revenue” and “Operating expenses-restructuring and asset impairment charges” in the Consolidated Statements of Operations. The following table summarizes the restructuring and asset impairment charges (in thousands):

	Year ended December 31,		
	2015	2014	2013
Product cost of revenue	$ 113	$ 315	$ 823
Operating expenses-Restructuring and asset impairment charges	1,372	2,761	1,421
Total	$ 1,485	$ 3,076	$ 2,244

Harmonic 2015 Restructuring

In the fourth quarter of 2014, the Company implemented a restructuring plan (the “Harmonic 2015 Restructuring Plan”) to reduce operating costs and the planned restructuring activities involve headcount reduction, exiting certain operating facilities and disposing excess assets. The Company recorded $2.2 million of restructuring and asset impairment charges under this plan in fiscal 2014 consisting primarily of a fixed asset impairment charge related to software development costs incurred for a discontinued information technology (“IT”) project; severance and benefits related to the termination of 19 employees worldwide and other charges. In fiscal 2015, the Company recorded an additional $1.5 million of restructuring charges under this plan consisting primarily of severance and benefits for the termination of 37 employees worldwide. The Company expects to complete its actions under this plan by early 2016.

The following table summarizes the activities in the Harmonic 2015 restructuring accrual during the years ended December 31, 2015 and 2014 (in thousands):

	Termination of an information technology ("IT") project	Severance and benefits	Termination of a research and development project	Other charges	Total
Charges for 2015 Restructuring Plan	$ 1,138	$ 599	$ 307	$ 125	$ 2,169
Cash payments	—	(294)	(307)	—	(601)
Non-cash write-offs	(1,138)	—	—	(108)	(1,246)
Balance at December 31, 2014	—	305	—	17	322
Charges for 2015 Restructuring Plan	—	1,413	—	204	1,617
Adjustments to restructuring provisions	—	(126)	—	(6)	(132)
Cash payments	—	(1,328)	—	(13)	(1,341)
Non-cash write-offs	—	—	—	(202)	(202)
Balance at December 31, 2015	$ —	$ 264	$ —	$ —	$ 264

The Company anticipates that the remaining restructuring accrual balance of $0.3 million will be paid out in 2016.

Harmonic 2013 Restructuring

The Company implemented a series of restructuring plans in 2013 to reduce costs and improve efficiencies and the actions extended through the third quarter of fiscal 2014. The Company recorded restructuring charges of $2.2 million in fiscal 2013 under this plan consisting primarily of severance and benefits related to the termination of 85 employees worldwide and, to a lesser extent, the costs associated with writing down some of its inventory to net realizable value due to restructuring activities in its Israel facilities. The Company recorded an additional $0.9 million restructuring charges in fiscal 2014 under this

plan primarily for severance and benefits related to the termination of 25 employees worldwide.

The following table summarizes the activities in the Harmonic 2013 restructuring accrual during the years ended December 31, 2014 and 2013 (in thousands):

	Severance	Impairment of Leasehold Improvement	Obsolete Inventories	Termination of a Research and Development Project	Excess Facilities	Total
Charges for 2013 Restructuring Plan	$ 1,663	$ 101	$ 404	$ —	$ —	$ 2,168
Adjustments to restructuring provisions	29	48	—	—	—	77
Cash payments	(1,513)	—	—	—	—	(1,513)
Non-cash write-offs	—	(149)	(404)	—	—	(553)
Balance at December 31, 2013	179	—	—	—	—	179
Charges for 2013 Restructuring Plan	829	—	—	63	32	924
Adjustments to restructuring provisions	(17)	—	—	—	—	(17)
Cash payments	(991)	—	—	(63)	(32)	(1,086)
Balance at December 31, 2014	$ —	$ —	$ —	$ —	$ —	$ —

HFC Restructuring

As a result of the sale of the cable access HFC business in March 2013, the Company recorded $0.6 million of restructuring charge under “Income from discontinued operations” in fiscal 2013. The restructuring charge consisted primarily of severance and benefits related to 19 employees terminated by the Company and Aurora.

The following table summarizes the activities in the HFC restructuring accrual during the years ended December 31, 2014 and 2013 (in thousands):

	Severance	Contract Termination	Total
Charges for HFC Restructuring Plan recorded in discontinued operations	$ 403	$ 124	$ 527
Adjustments to restructuring provisions	102	(29)	73
Cash payments	(492)	(95)	(587)
Balance at December 31, 2013	13	—	13
Cash payments	(13)	—	(13)
Balance at December 31, 2014	$ —	$ —	$ —

NOTE 12: CONVERTIBLE NOTES AND CREDIT FACILITIES

4.00% Convertible Senior Notes

In December 2015, the Company issued $128.25 million aggregate principal amount of unsecured convertible senior notes due 2020 (the “offering” or “Notes”, as applicable) through a private placement with a financial institution. The Notes do not contain any financial covenants. The Notes bear interest at a fixed rate of 4.00% per year, payable semiannually in arrears on June 1 and December 1 of each year, beginning on June 1, 2016. The Notes will mature on December 1, 2020, unless earlier repurchased or converted. The Company incurred approximately $4.1 million of debt issuance cost, of which $3.5 million was paid in 2015 and the remainder will be paid in the first quarter of 2016.

Concurrent with the closing of the offering, the Company used $49.9 million of the net proceeds to repurchase 11.1 million shares of the Company’s common stock from purchasers of the offering in privately negotiated transactions effected through the initial purchaser or its affiliate as the Company’s agent. Additionally, the Company used the remaining net proceeds from the offering to fund the Thomson Video Networks SAS (“TVN”) acquisition, which completed on February 29, 2016 (see “Note 20, Subsequent Event-TVN Acquisition” for additional information).

Subject to satisfaction of certain conditions and during certain periods, the Notes will be convertible at the option of

holders into cash, shares of the Company's common stock or a combination thereof, at the Company's election, at an initial conversion rate of 173.9978 shares of Common Stock per $1,000 principal amount of Notes (which is equivalent to an initial conversion price of approximately $5.75 per share). The conversion rate and the corresponding conversion price will be subject to adjustment upon the occurrence of certain events, but will not be adjusted for any accrued and unpaid interest.

Prior to September 1, 2020, the Notes will be convertible only under the following circumstances: (1) during any fiscal quarter commencing after the fiscal quarter ending on April 3, 2016 (and only during such fiscal quarter), if the last reported sale price of the Company's common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last trading day of the immediately preceding fiscal quarter is greater than or equal to 130% of the conversion price of the Notes on each applicable trading day; (2) during the five business day period after any five consecutive trading day period (the " measurement period ") in which the trading price per $1,000 principal amount of Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of the Company's common stock and the conversion rate on each such trading day; or (3) upon the occurrence of specified corporate events. Commencing on September 1, 2020 until the close of business on the second scheduled trading day immediately preceding the maturity date, the Notes will be convertible in multiples of $1,000 principal amount regardless of the foregoing circumstances.

If a fundamental change occurs, holders of the Notes may require the Company to purchase all or any portion of their Notes for cash at a repurchase price equal to 100% of the principal amount of the Notes to be repurchased, plus any accrued and unpaid interest to, but excluding, the fundamental change repurchase date. In addition, if specific corporate events occur prior to the maturity date, the conversion rate may be increased for a holder who elects to convert the Notes in connection with such a corporate event.

In accounting for the issuance of the Notes, the Company separated the Notes into liability and equity components. The carrying amount of the liability component was calculated by measuring the fair value of a similar liability that does not have an associated convertible feature. The carrying amount of the equity component representing the conversion option was determined by deducting the fair value of the liability component from the initial proceeds of the Notes as a whole. The difference between the initial proceeds of the Notes and the liability component (the "debt discount") of $26.9 million, is amortized to interest expense using the effective interest method over the term of the Notes. The equity component of the Notes is included in additional paid-in capital in the Consolidated Balance Sheets and is not remeasured as long as it continues to meet the conditions for equity classification.

In accounting for the transaction costs related to the issuance of the Notes, the Company allocated the total amount incurred to the liability and equity components using the same proportions as the proceeds from the Notes. Transaction costs attributable to the liability component were recorded as a direct deduction from the carrying amount of the debt liability in long-term liability in the Consolidated Balance Sheets and are being amortized to interest expense in the Consolidated Statements of Operations using the effective interest method over the term of the Notes. Transaction costs attributable to the equity component were netted with the equity component of the Notes in additional paid-in capital in the Consolidated Balance Sheets. The Company recorded liability issuance costs, or debt issuance costs, of $3.2 million and equity issuance costs of $0.9 million.

The following table presents the components of the Notes as of December 31, 2015 (in thousands, except for years and percentages):

Liability:		
Principal amount	$	128,250
Less: Debt discount, net of amortization		(26,732)
Less: Debt issuance costs, net of amortization		(3,223)
Carrying amount	$	98,295
Remaining amortization period (years)		4.9 years
Effective interest rate on liability component		9.94%
Equity:		
Value of conversion option	$	26,925
Less: Equity issuance costs		(863)
Carrying amount	$	26,062

The following table presents interest expense recognized related to the Notes for the year ended December 31, 2015 (in thousands):

Contractual interest expense	$ 240
Amortization of debt discount	193
Amortization of debt issuance costs	23
Total interest expense recognized	$ 456

Credit Facilities

On December 22, 2014, the Company entered into a Credit Agreement (the "Credit Agreement") with JPMorgan Chase Bank, N.A. ("JPMorgan") for a $20.0 million revolving credit facility, with a sublimit of $10.0 million for the issuance of commercial and standby letters of credit on the Company's behalf. Revolving loans under the Credit Agreement may be borrowed, repaid and re-borrowed until December 22, 2015, at which time all amounts borrowed must be repaid. On December 7, 2015, the Company entered into a first amendment to the Credit Agreement with JPMorgan to permit the Company to incur the indebtedness related to issuance of the Notes mentioned above. On December 15, 2015, the Company entered into a second amendment to the Credit Agreement with JPMorgan to extend the expiration date of the Credit Agreement to February 20, 2016. The Company did not renew the Credit Agreement and it duly expired on February 20, 2016. There were no borrowings under the Credit Agreement during the year ended December 31, 2015. As of December 31, 2015, the Company was in compliance with the covenants under the Credit Agreement.

NOTE 13: EMPLOYEE BENEFIT PLANS AND STOCK-BASED COMPENSATION

The Company's stock benefit plans include the employee stock purchase plan and current active stock plans adopted in 1995 and 2002 as well as one stock plan assumed through an acquisition in 2010. Other than the employee stock purchase plan, the 1995 stock plan and the 2002 director plan described below, the other inactive plans have no shares available for future grant. As of December 31, 2015, for the stock plan assumed through an acquisition, 129,385 shares were reserved for issuance.

Employee Stock Plans

1995 Stock Plan

The 1995 Stock Plan provides for the grant of incentive stock options, non-statutory stock options and restricted stock units ("RSUs"). Incentive stock options may be granted only to employees. All other awards may be granted to employees and consultants. Under the terms of the 1995 Stock Plan, incentive stock options may be granted at prices not less than 100% of the fair value of the Company's common stock on the date of grant and non-statutory stock options may be granted at prices not less than 85% of the fair value of the Company's common stock on the date of grant. RSUs have no exercise price. Both options and RSUs vest over a period of time as determined by the Board, generally two to four years, and expire seven years from date of grant. Options granted prior to February 2006 expire ten years from the date of grant. Grants of RSUs and any non-statutory stock options issued at prices less than the fair market value on the date of grant decrease the plan reserve 1.5 shares for every unit or share granted and any forfeitures of these awards due to their not vesting would increase the plan reserve by 1.5 shares for every unit or share forfeited. As of December 31, 2015, an aggregate of 13,065,852 shares of common stock were reserved for issuance under the 1995 Stock Plan, of which 5,524,259 shares remained available for grant.

2002 Director Plan

The 2002 Director Plan provides for the grant of non-statutory stock options and RSUs to non-employee directors of the Company. Under the terms of the 2002 Director Plan, non-statutory stock options may be granted at prices not less than 100% of the fair value of the Company's common stock on the date of grant. RSUs have no exercise price. Both options and RSUs vest over a period of time as determined by the Board, generally three years for the initial grant and one year for subsequent grants to a non-employee director, and expire seven years from date of grant. Grants of RSUs decrease the plan reserve 1.5 shares for every unit granted and any forfeitures of these awards due to their not vesting would increase the plan reserve by 1.5 shares for every unit forfeited. In November 2015, the authorized number of shares under the 2002 Director plan was increased from 2,000,000 to 2,350,000. As of December 31, 2015, an aggregate of 810,230 shares of common stock were reserved for issuance under the 2002 Director Plan, of which 625,244 shares remained available for grant.

Employee Stock Purchase Plan

The 2002 Employee Stock Purchase Plan ("ESPP") provides for the issuance of share purchase rights to employees of the Company. The ESPP is intended to qualify as an "employee stock purchase plan" under Section 423 of the Internal Revenue

Code. The ESPP enables employees to purchase shares at 85% of the fair market value of the Common Stock at the beginning or end of the offering period, whichever is lower. Offering periods generally begin on the first trading day on or after January 1 and July 1 of each year. Employees may participate through payroll deductions of 1% to 10% of their earnings. In the event that there are insufficient shares in the plan to fully fund the issuance, the available shares will be allocated across all participants based on their contributions relative to the total contributions received for the offering period. Under the ESPP, 888,152, 440,040 and 1,230,851 shares were issued during fiscal 2015, 2014 and 2013, respectively, representing $5.2 million, $2.7 million, and $4.8 million in contributions. As of December 31, 2015, 671,848 shares were reserved for future purchases by eligible employees.

Stock Options and Restricted Stock Units

The following table summarizes the Company's stock option and restricted stock unit activity during the year ended December 31, 2015 (in thousands, except per share amounts):

		Stock Options Outstanding		Restricted Stock Units Outstanding	
	Shares Available for Grant	Number of Shares	Weighted Average Exercise Price	Number of Units	Weighted Average Grant Date Fair Value
Balance at December 31, 2014	7,480	7,255	$ 6.65	2,241	$ 6.40
Authorized	350	—	—	—	—
Granted	(4,471)	1,378	7.29	2,062	7.05
Options exercised	—	(750)	5.31	—	—
Shares released	—	—	—	(1,721)	6.47
Forfeited or canceled	2,791	(2,209)	7.73	(400)	6.79
Balance at December 31, 2015	6,150	5,674	$ 6.56	2,182	$ 6.99

The following table summarizes information about stock options outstanding as of December 31, 2015 (in thousands, except per share amounts and term):

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Vested and expected to vest	5,463	$ 6.55	3.4	$ 236
Exercisable	3,708	6.42	2.4	236

The intrinsic value of options vested and expected to vest and exercisable as of December 31, 2015 is calculated based on the difference between the exercise price and the fair value of the Company's common stock as of December 31, 2015. The intrinsic value of options exercised during the years ended December 31, 2015, 2014 and 2013 was $1.7 million, $0.8 million and $2.3 million, respectively, and is calculated based on the difference between the exercise price and the fair value of the Company's common stock as of the exercise date.

The following table summarizes information about restricted stock units outstanding as of December 31, 2015 (in thousands, except term):

	Number of Shares Underlying Restricted Stock Units	Weighted Average Remaining Vesting Period (Years)	Aggregate Fair Value
Vested and expected to vest	1,909	0.7	$ 8,035

The fair value of restricted stock units vested and expected to vest as of December 31, 2015 is calculated based on the fair value of the Company's common stock as of December 31, 2015.

Stock-based Compensation

The following table summarizes stock-based compensation expense for all plans (in thousands):

	Year ended December 31,		
	2015	2014	2013
Employee stock-based compensation in:			
Cost of revenue	$ 1,862	$ 2,359	$ 2,411
Research and development expense	4,435	4,844	4,431
Selling, general and administrative expense	9,285	10,084	9,160
Total stock-based compensation in operating expense	13,720	14,928	13,591
Total employee stock-based compensation recognized in loss from continuing operations	$ 15,582	$ 17,287	$ 16,002

As of December 31, 2015, total unrecognized stock-based compensation cost, net of estimated forfeitures, related to unvested stock options and restricted stock units was $11.9 million and is expected to be recognized over a weighted-average period of 1.9 years.

Valuation Assumptions

The Company estimates the fair value of employee stock options and ESPP shares using a Black-Scholes option valuation model. At the date of grant, the Company estimated the fair value of each stock option grant and purchase right granted under the ESPP using the following weighted average assumptions:

	Employee Stock Options			ESPP		
	2015	2014	2013	2015	2014	2013
Expected term (in years)	4.65	4.70	4.70	0.50	0.50	0.50
Volatility	38%	40%	50%	34%	32%	31%
Risk-free interest rate	1.5%	1.7%	0.9%	0.3%	0.1%	0.2%
Dividend yield	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

The expected term of the employee stock option represents the weighted-average period that the stock options are expected to remain outstanding. The computation of expected term was determined based on historical experience of similar awards, giving consideration to the contractual terms of the stock-based awards, vesting schedules and expectations of future employee behavior. The expected term of the stock purchase right under ESPP represents the period of time from the beginning of the offering period to the purchase date. The Company uses its historical volatility for a period equivalent to the expected term of the options to estimate the expected volatility. The risk-free interest rate that the Company uses in the Black-Scholes option valuation model is based on U.S. Treasury zero-coupon issues with remaining terms similar to the expected term. The Company has never declared or paid any cash dividends and does not plan to pay cash dividends in the foreseeable future, and, therefore, used an expected dividend yield of zero in the valuation model.

The Company is required to estimate forfeitures at the time of grant and revise those estimates in subsequent periods if actual forfeitures differ from those estimates. The Company uses historical data to estimate pre-vesting option forfeitures and records stock-based compensation expense only for those awards that are expected to vest. All stock-based payment awards are amortized on a straight-line basis over the requisite service periods of the awards, which are generally the vesting periods.

The weighted-average fair value per share of options granted for the years ended December 31, 2015, 2014 and 2013 was $2.51, $2.36 and $2.55, respectively. The fair value of all stock options vested during the years ended December 31, 2015, 2014 and 2013 was $3.0 million, $3.2 million and $3.3 million, respectively.

The estimated weighted-average fair value per share of stock purchase rights granted for the years ended December 31, 2015, 2014 and 2013 was $1.69, $1.79 and $1.21, respectively.

The total realized tax benefit attributable to stock options exercised during the years ended December 31, 2014 and 2013, was $15,000 and $141,000, respectively. We realized no income tax benefit from stock option exercises for the year ended December 31, 2015 due to recurring losses and valuation allowances. As required, we present excess tax benefits from the exercise of stock options, if any, as financing cash flows rather than operating cash flows.

The estimated fair value of restricted stock units is based on the market price of the Company's common stock on the grant date. The fair value of all restricted stock units issued during the years ended December 31, 2015, 2014 and 2013 was $11.1 million, $12.0 million and $11.9 million, respectively.

401(k) Plan

The Company has a retirement/savings plan which qualifies as a thrift plan under Section 401(k) of the Internal Revenue Code. This plan allows participants to contribute up to the applicable Internal Revenue Code limitations under the plan. The Company can make discretionary contributions to the plan of 25% of the first 4% contributed by eligible participants, up to a maximum contribution per participant of $1,000 per year. The Company's contributions to the plan was $0.4 million for each of the fiscal year from 2013 through 2015.

NOTE 14: STOCKHOLDERS' EQUITY

Preferred Stock

Harmonic has 5,000,000 authorized shares of preferred stock. No shares of preferred stock were issued or outstanding in any of the periods presented.

Common Stock Repurchases

In April 2012, the Board approved a stock repurchase program that provided for the repurchase of up to $25 million of the Company's outstanding common stock. Under the program, the Company is authorized to repurchase shares of common stock in open market transactions or pursuant to any trading plan that may be adopted in accordance with Rule 10b5-1 of the Exchange Act. From time to time, the Board may approve further increases to the program and the amount approved for this program was increased to $300 million periodically through May 2014 and the repurchase period has been extended through the end of 2016. The timing and actual number of shares repurchased, if any, will depend on a variety of factors, including the price and availability of our shares, trading volume and general market conditions. The purchases are funded from available working capital. The program may be suspended or discontinued at any time without prior notice.

During the years ended December 31, 2015, 2014 and 2013, the Company repurchased from open market transactions 3.4 million, 13.9 million and 6.3 million shares of its common stock, respectively, at a total cost of $23.0 million, $93.1 million and $40.6 million, respectively, and at an average share price of $6.70, $6.70 and $6.48, respectively. In addition, $76.0 million, including $1.0 million of expenses, was spent in the "modified Dutch auction" tender offer, which closed on May 24, 2013. Under the tender offer, the Company repurchased 12.0 million shares of its common stock at $6.25 per share. The remaining authorized amount for repurchases under this program was $45.7 million as of December 31, 2015. The excess of cost over par value for the repurchase of the Company's common stock is recorded to additional paid-in-capital. Common stock repurchased under the program was recorded based upon the trade date for accounting purposes. All common shares repurchased under this program have been retired.

Additionally, on December 8, 2015, the Board approved the use of part of the proceeds from the sale and issuance of the Notes, issued on December 14, 2105, (see Note 12, "Convertible Notes and Credit Facilities" for additional information on the Notes) to repurchase shares of the Company's common stock from purchasers of the Note offering in privately negotiated transactions effected through the initial purchaser or its affiliate as the Company's agent. Repurchases of 11.1 million shares of the Company's common stock effected concurrently with the Note offering was completed on December 14, 2015 at a price of $4.49 per share for an aggregate purchase price of $49.9 million.

Accumulated Other Comprehensive Loss

The components of accumulated other comprehensive loss were as follows (in thousands):

	December 31,	
	2015	2014
Foreign currency translation adjustments	$ (2,634)	$ (1,523)
Unrealized loss on investments, net of taxes	(1,538)	(768)
Unrealized gain (loss) on cash flow hedges[1]	(246)	311
Total accumulated other comprehensive loss	$ (4,418)	$ (1,980)

(1) See Consolidated Statements of Comprehensive Income or Loss for the amounts related to cash flow hedges that were reclassified into the Consolidated Statements of Operations for the periods presented.

NOTE 15: INCOME TAXES

Loss from continuing operations before income taxes consists of the following (in thousands):

	Year ended December 31,		
	2015	2014	2013
United States	$ (16,826)	$ (15,515)	$ (31,521)
International	758	(6,280)	8,369
Loss from continuing operations before income taxes	$ (16,068)	$ (21,795)	$ (23,152)

The components of the provision for (benefit from) income taxes consist of the following (in thousands):

	Year ended December 31,		
	2015	2014	2013
Current:			
Federal	$ (1,981)	$ (11,525)	$ (38,243)
State	120	8	93
International	1,966	1,619	1,988
Deferred:			
Federal	—	25,722	(10,543)
State	—	8,249	3,023
International	(512)	380	(1,059)
Total provision for (benefit from) income taxes	$ (407)	$ 24,453	$ (44,741)

The differences between the provision for (benefit from) income taxes computed at the U.S. federal statutory rate at 35% and the Company's actual provision for (benefit from) income taxes are as follows (in thousands):

	Year ended December 31,		
	2015	2014	2013
Benefit from for income taxes at U.S. Federal statutory rate	$ (5,624)	$ (7,628)	$ (8,103)
State taxes	120	5,368	2,940
Differential in rates on foreign earnings	1,584	4,311	(1,396)
Non-deductible amortization expense	947	3,138	4,311
Change in valuation allowance	2,230	26,053	(996)
Change in liabilities for uncertain tax positions	(1,083)	(8,126)	(35,742)
Non-deductible stock-based compensation	1,398	1,665	981
Research and development tax credits	(178)	(841)	(5,044)
Non-deductible meals and entertainment	395	361	346
Non-deductible acquisition cost	457	—	—
Adjustments related to tax positions taken during prior years	(781)	—	(1,154)
Tax-exempt investment income	—	—	(304)
Other	128	152	(580)
Total provision for (benefit from) income taxes	$ (407)	$ 24,453	$ (44,741)

The Company operates in multiple jurisdictions and its profits are taxed pursuant to the tax laws of these jurisdictions. Our effective income tax rate may be affected by changes in or interpretations of tax laws and tax agreements in any given jurisdiction, utilization of net operating loss and tax credit carry forwards, changes in geographical mix of income and expense, and changes in management's assessment of matters such as the ability to realize deferred tax assets. The Company's effective tax rate varies from year to year primarily due to the absence of several onetime, discrete items that benefited or decremented the tax rates in the previous years.

In 2015, the Company had worldwide consolidated loss before tax of $16.1 million and tax benefit of $0.4 million, with an effective income tax rate of 3%. The Company's 2015 effective income tax rate differed from the U.S. federal statutory rate of 35% primarily due to a difference in foreign tax rates and the Company's U.S. losses generated for the year received no tax benefit as a result of a full valuation allowance against all of its U.S. deferred tax assets, as well as adjustments relating to its 2014 U.S. federal tax return filed in September 2015 and the reversal of uncertain tax positions resulting from the expiration of statutes of limitations. In addition, the impairment of the VJU investment (see Note 5, "Investments in Other Equity Securities") received no tax benefit.

In 2014, as a result of cumulated losses in the recent years and the analysis of all available positive and negative evidence, the Company recorded a full valuation allowance against the beginning of year U.S. net deferred tax assets of $34.0 million. In addition, in 2014, the Company carried back its 2013 federal net operating loss to 2011 resulting in a tax refund. Certain federal R&D credits were also freed up as a result and utilized to offset income tax reserves as a result of the adoption of the ASU 2013-11. These two events reduced the valuation allowance by approximately $5.0 million and led to the net change of valuation allowance of $29.0 million. This unfavorable net impact was offset partially by a tax benefit of $9.0 million associated with the release of tax reserves including accrued interest and penalties, for our 2010 tax year in the United States, as a result of the expiration of the applicable statute of limitation for that year.

The benefit from income taxes for 2013 included a release of $39.0 million of tax reserves, including accrued interests and penalties, for our 2008 and 2009 tax years in the United States, as a result of the expiration of the applicable statute of limitations for those tax years. In addition, in 2013, the Company recorded a $2.4 million tax benefit arising from the reinstatement of the 2012 United States federal research tax credit.

The components of net deferred tax assets included in the Consolidated Balance Sheets are as follows (in thousands):

	December 31,	
	2015	2014
Deferred tax assets:		
Reserves and accruals	$ 16,413	$ 21,048
Net operating loss carryovers	27,023	24,946
Research and development credit carryovers	27,595	26,404
Deferred stock-based compensation	5,834	6,727
Other tax credits	2,738	2,738
Gross deferred tax assets	79,603	81,863
Valuation allowance	(64,545)	(75,199)
Gross deferred tax assets after valuation allowance	15,058	6,664
Deferred tax liabilities:		
Depreciation and amortization	(1,189)	(2,137)
Intangibles	(899)	(2,228)
Convertible notes	(10,233)	—
Other	(510)	(589)
Gross deferred tax liabilities	(12,831)	(4,954)
Net deferred tax assets	$ 2,227	$ 1,710

The following table summarizes the activity related to the Company's valuation allowance (in thousands):

	Year ended December 31,		
	2015	2014	2013
Balance at beginning of period	$ 75,199	$ 38,644	$ 34,347
Additions	3,068	39,556	6,364
Deductions	(13,722)	(3,001)	(2,067)
Balance at end of period	$ 64,545	$ 75,199	$ 38,644

Management regularly assesses the ability to realize deferred tax assets recorded based upon the weight of available evidence, including such factors as recent earnings history and expected future taxable income on a jurisdiction by jurisdiction basis. In the event that the Company changes its determination as to the amount of realizable deferred tax assets, the Company will adjust its valuation allowance with a corresponding impact to the provision for income taxes in the period in which such determination is made.

In 2015, the Company continued to record a valuation allowance against all of its United States deferred tax assets as well as its net operating losses generated in 2015 due to significant cumulative losses in the United States, resulting in a net increase in valuation allowance of $3.1 million. This increase in valuation allowance is offset partially by the release of $0.9 million valuation allowance against one of its Israel subsidiaries due to cumulative income generated in the recent years as well as the analysis of all available positive and negative evidence. Additionally, in December 2015, the Company issued $128.25 million of the Notes which led to the establishment of $10.3 million of net deferred tax liability associated with the equity component

of the Notes and its related debt issuance costs which were recorded in the Company's stockholders' equity according to the applicable accounting guidance. (see Note 12, "Convertible Notes and Credit Facilities" for additional information on the Notes). This deferred tax liability has led to a net reduction of valuation allowance of an equal amount. As of December 31, 2015, the Company had a valuation allowance of $64.5 million against substantially all of its U.S. federal, California and other state and to a lesser extent, foreign net deferred tax assets, related to net operating loss carryforwards and R&D tax credit carryforwards.

In November 2015, the FASB issued an accounting standard update that all deferred tax assets and liabilities, along with any related valuation allowance, be classified as non-current on the balance sheet. The accounting standard update will be effective for the Company beginning in the first quarter of fiscal 2017 and early adoption is permitted. The Company early-adopted this accounting standard update as of the end of its fiscal 2015 on a prospective basis, resulting in $15.9 million of net deferred tax assets, along with its related valuation allowance, being classified from current assets to non-current assets on the Consolidated Balance Sheet as of December 31, 2015. Other than this reclassification, the adoption of this accounting standard update did not have an impact on the Company's consolidated financial statements.

As of December 31, 2015, the Company had $81.1 million, $11.8 million, $39.4 million and $11.8 million of foreign, U.S. federal, U.S. California state, and U.S. other states net operating loss carryforwards ("NOL"), respectively. There is no expiration to the utilization of the foreign NOL, while the U.S. federal and California NOL will begin to expire at various dates beginning in 2016 through 2035, if not utilized. As of December 31, 2015, the U.S. federal and California NOL included approximately $1.4 million and $6.4 million relating to stock options tax deductions. These amounts are not included in the Company's gross or net deferred tax assets pursuant to applicable accounting guidance and, if and when realized, through a reduction in income tax payable, will be accounted for as a credit to additional paid-in capital.

As of December 31, 2015, the Company had U.S. federal and California state tax credit carryforwards of approximately $9.2 million and $31.3 million, respectively. If not utilized, the U.S. federal tax credit carryforwards will begin to expire in 2031, while the California tax credit forward will not expire. In addition, as of December 31, 2015, the Company had U.S. federal alternative minimum tax ("AMT") credit carryforward of approximately $2.7 million, which will not expire.

The Company has not provided U.S. federal and California state income taxes, as well as foreign withholding taxes, on approximately $8.3 million of cumulative undistributed earnings for certain non-U.S. subsidiaries, because such earnings are intended to be indefinitely reinvested. Determination of the amount of unrecognized deferred tax liability for temporary differences related to investment in these non-U.S. subsidiaries that are essentially permanent in duration is not practicable.

The Company applies the provisions of the applicable accounting guidance regarding accounting for uncertainty in income taxes, which requires application of a more-likely-than-not threshold to the recognition and derecognition of uncertain tax positions. If the recognition threshold is met, the applicable accounting guidance permits the recognition of a tax benefit measured at the largest amount of such tax benefit that, in our judgment, is more than fifty percent likely to be realized upon settlement. It further requires that a change in judgment related to the expected ultimate resolution of uncertain tax positions be recognized in earnings in the period in which such determination is made. The Company will continue to review its tax positions and provide for, or reverse, unrecognized tax benefits as issues arise. As of December 31, 2015, the Company had $15.6 million that would favorably impact the effective tax rate in future periods if recognized. The following table summarizes the activity related to the Company's gross unrecognized tax benefits (in millions):

	Year ended December 31,		
	2015	2014	2013
Balance at beginning of period	$ 15.7	$ 24.2	$ 52.1
Increase in balance related to tax positions taken during current year	0.7	1.0	5.4
Decrease in balance as a result of a lapse of the applicable statues of limitations	(0.9)	(9.5)	(1.3)
Decrease in balance due to settlement with tax authorities	—	—	(32.1)
Increase in balance related to tax positions taken during prior years	0.3	—	0.1
Decrease in balance related to tax positions taken during prior years	(0.2)	—	—
Balance at end of period	$ 15.6	$ 15.7	$ 24.2

The Company recognizes interest and penalties related to unrecognized tax positions in income tax expenses on the Consolidated Statements of Operations. The net interest and penalties reduction recorded for the years ended December 31, 2015, 2014 and 2013 related to unrecognized tax benefits was ($31,000), ($1.0) million and ($5.6) million, respectively. The net reduction in interest and penalties in 2015, 2014 and 2013 was attributable to the reversal of accrued interest and penalties of $0.2 million, $1.8 million and $7.5 million, respectively, due to decreases in unrecognized tax benefits resulting from the expiration of the statutes of limitations on the Company's U.S. corporate tax returns for 2008 through 2011 tax years. The

Company had approximately $0.5 million of accrued interest and penalties related to uncertain tax positions as of December 31, 2015 and December 31, 2014.

The Company files U.S. federal, state, and foreign income tax returns in jurisdictions with varying statutes of limitations during which such tax returns may be audited and adjusted by the relevant tax authorities. The U.S. Internal Revenue Service has concluded its audit for the 2008, 2009 and 2010 tax years. The statute of limitations on the Company's 2008 and 2009, and 2010 and 2011 corporate income tax returns expired in September of 2013, 2014 and 2015, respectively. As a result, the Company released $39.0 million of related tax reserves, including accrued interests and penalties, for the 2008 and 2009 tax years in 2013. Additionally, the Company released $9.0 million and $0.5 million of related tax reserves, including accrued interests and penalties, for the 2010 and 2011 tax years in 2014 and 2015, respectively.

The 2012 through 2015 tax years generally remain subject to examination by U.S. federal and most state tax authorities. In significant foreign jurisdictions, the 2007 through 2015 tax years generally remain subject to examination by their respective tax authorities. The Company is currently under examination by the U.S. Internal Revenue Service for its 2012 federal income tax return, which commenced officially in August 2015, and so far there has been no proposed adjustment received for the audit. In addition, a subsidiary of the Company is under audit for the 2012 and 2013 tax years, which commenced in the first quarter of 2015, by the Israel tax authority. If, upon the conclusion of these audits, the ultimate determination of taxes owed in the United States or Israel is for an amount in excess of the tax provision the Company has recorded in the applicable period, the Company's overall tax expense, effective tax rate, operating results and cash flow could be materially and adversely impacted in the period of adjustment.

On July 27, 2015, the U.S. Tax Court issued an opinion in Altera Corp. v. Commissioner related to the treatment of stock-based compensation expense in an intercompany cost-sharing arrangement. A final decision was entered by the U.S. Tax Court on December 1, 2015. On February 19, 2016, the U.S. Internal Revenue Service filed a notice of appeal in *Altera Corp. v. Commissioner*, 145 T.C. No. 3 (2015), to the Ninth Circuit Court of Appeal. The Ninth Circuit will decide whether a regulation that mandates that stock-based compensation costs related to the intangible development activity of a qualified cost sharing arrangement (QCSA) must be included in the joint cost pool of the QCSA (the "all costs rule") is consistent with the arm's length standard as enunciated under section 482. The Company concluded that no adjustment to the consolidated financial statements as of December 31, 2015 is appropriate at this time due to the uncertainties with respect to the ultimate resolution of this case.

The Company's operations in Switzerland are subject to a reduced tax rate under the Switzerland tax holiday which requires various thresholds of investment and employment in Switzerland. The Company has met these various thresholds and the Switzerland tax holiday is effective through the end of 2018. The income tax benefits attributable to the Switzerland holiday were estimated to be approximately $0.7 million, $0.7 million and $1.5 million in 2015, 2014 and 2013, respectively, increasing diluted earnings per share by approximately $0.008, $0.008 and $0.014 in 2015, 2014 and 2013, respectively.

NOTE 16: NET INCOME (LOSS) PER SHARE

Basic net income (loss) per share is computed by dividing the net income (loss) attributable to common stockholders for the applicable period by the weighted average number of common shares outstanding during the period. Potentially dilutive shares, consisting of outstanding stock options, restricted stock units, ESPP plan awards as well as the Notes, are excluded from the net income (loss) per share computations when their effect is anti-dilutive.

The following table presents the calculation of basic and diluted net income (loss) per share (in thousands, except per share amounts):

	December 31,		
	2015	2014	2013
Numerator:			
Income (loss) from continuing operations	$ (15,661)	$ (46,248)	$ 21,589
Income from discontinued operations	—	—	15,438
Net income (loss)	$ (15,661)	$ (46,248)	$ 37,027
Denominator:			
Weighted average shares outstanding:			
Basic	87,514	92,508	106,529
Effect of dilutive securities from stock options, restricted stock units and ESPP	—	—	1,279
Diluted	87,514	92,508	107,808
Basic net income (loss) per share from:			
Continuing operations	$ (0.18)	$ (0.50)	$ 0.20
Discontinued operations	$ —	$ —	$ 0.14
Net income (loss)	$ (0.18)	$ (0.50)	$ 0.35
Diluted net income (loss) per share from:			
Continuing operations	$ (0.18)	$ (0.50)	$ 0.20
Discontinued operations	$ —	$ —	$ 0.14
Net income (loss)	$ (0.18)	$ (0.50)	$ 0.34

The diluted net loss per share is the same as basic net loss per share for the years ended December 31, 2015 and 2014 because potential common shares are only considered when their effect would be dilutive. The following table presents the potential weighted common shares outstanding that were excluded from the computation of basic and diluted net loss per share calculations (in thousands):

	December 31,		
	2015	2014	2013
Stock options	6,460	7,115	6,454
Restricted stock units	2,178	2,066	437
Employee stock purchase plan	518	346	175
Total	9,156	9,527	7,066

Also excluded from the table above are the Notes, which are convertible under certain conditions (see Note 12, Convertible Notes and Credit Facilities for additional information on the Notes) into an aggregate of 22,304,348 shares of common stock. Since the Company's intent is to settle the principal amount of the Notes in cash, the treasury stock method is being used to calculate any potential dilutive effect of the conversion spread on diluted net income per share, if applicable. The conversion spread will have a dilutive impact on diluted net income per share when the Company's average market price of its common stock for a given period exceeds the conversion price of $5.75 per share.

NOTE 17: SEGMENT INFORMATION, GEOGRAPHIC INFORMATION AND CUSTOMER CONCENTRATION

Segment Information

Operating segments are defined as components of an enterprise that engage in business activities for which separate financial information is available and evaluated by the Company's CODM, which for the Company is its Chief Executive Officer, in deciding how to allocate resources and assess performance. Based on our internal reporting structure, the Company consists of two operating segments: Video and Cable Edge, and prior to the fourth quarter of 2014, the Company operated its business in only one reportable segment. The operating segments were determined based on the nature of the products offered. The Video segment sells video processing and production and playout solutions and services worldwide to broadcast and media companies, streaming new media companies, cable operators, and satellite and telecommunications (telco) Pay-TV service providers. The Cable Edge segment sells cable edge solutions and related services to cable operators globally.

The Company does not allocate amortization of intangibles, stock-based compensation, restructuring and asset impairment charges, and certain other non-recurring charges to the operating income for each segment because management does not include this information in the measurement of the performance of the operating segments. A measure of assets by segment is not applicable as segment assets are not included in the discrete financial information provided to the CODM.

The following tables provide summary financial information by reportable segment (in thousands):

	Year ended December 31,		
	2015	2014	2013
Net revenue:			
Video	$ 291,779	$ 326,756	$ 381,994
Cable Edge	85,248	106,801	79,946
Total consolidated net revenue	$ 377,027	$ 433,557	$ 461,940
Operating income (loss):			
Video	$ 13,529	$ 18,073	$ 24,583
Cable Edge	(1,599)	1,239	(1,282)
Total segment operating income	11,930	19,312	23,301
Unallocated corporate expenses	(2,794)	(3,076)	(2,994)
Stock-based compensation	(15,582)	(17,287)	(16,002)
Amortization of intangibles	(6,502)	(20,520)	(27,329)
Loss from operations	(12,948)	(21,571)	(23,024)
Non-operating expense	(3,120)	(224)	(128)
Loss from continuing operations before income taxes	$ (16,068)	$ (21,795)	$ (23,152)

Unallocated corporate expenses include certain corporate-level operating expenses and charges such as restructuring and asset impairment charges, transaction costs associated with the potential TVN acquisition (See Note 20, "Subsequent Event-TVN Acquisition" for additional information), and proxy contest related expenses.

Geographic Information

Revenue by geographic region, based on the location at which each sale originates, and property and equipment, net by geographic region, are summarized as follows (in thousands):

	Year ended December 31,		
	2015	2014	2013
Net revenue:			
United States	$ 175,466	$ 206,610	$ 199,790
Other countries	201,561	226,947	262,150
Total	$ 377,027	$ 433,557	$ 461,940

Other than the U.S., no country accounted for 10% or more of the Company's net revenues for the years ended December 31, 2015, 2014, and 2013.

	As of December 31,	
	2015	2014
Property and equipment, net:		
United States	$ 17,086	$ 19,148
Israel	7,560	4,888
Other countries	2,366	3,185
Total	$ 27,012	$ 27,221

Customer Concentration

Net revenue from Comcast accounted for 12%, 16% and 12%, respectively, of the Company's total net revenue during the years ended December 31, 2015, 2014 and 2013. Other than Comcast, no customer accounted for 10% or more of the Company's total net revenue for any of the above periods.

NOTE 18: COMMITMENTS AND CONTINGENCIES

Leases

The Company leases its facilities under non-cancelable operating leases which expire at various dates through November 2022. In addition, the Company leases vehicles and phones in Israel under non-cancelable operating leases, the last of which expires in 2018. Total rent expense related to these operating leases was $9.0 million, $9.8 million and $9.6 million for the years ended December 31, 2015, 2014 and 2013, respectively. Future minimum lease payments under non-cancelable operating leases at December 31, 2015, are as follows (in thousands):

	Operating Leases
Year ending December 31,	
2016	$ 10,784
2017	10,247
2018	9,741
2019	8,355
2020	5,734
Thereafter	676
Total minimum payments	$ 45,537

Warranties

The Company accrues for estimated warranty costs at the time of product shipment. Management periodically reviews the estimated fair value of its warranty liability and records adjustments based on the terms of warranties provided to customers, historical and anticipated warranty claims experience, and estimates of the timing and cost of warranty claims. Activity for the Company's warranty accrual, which is included in accrued liabilities, is summarized below (in thousands):

	Year ended December 31,		
	2015	2014	2013
Balance at beginning of period	$ 4,242	$ 3,606	$ 4,292
Transfer to Aurora as part of the sale of discontinued operations	—	—	(939)
Accrual for current period warranties	5,470	7,278	7,192
Changes in liability related to pre-existing warranties	(92)	3	(35)
Warranty costs incurred	(5,707)	(6,645)	(6,904)
Balance at end of period	$ 3,913	$ 4,242	$ 3,606

Standby Letters of Credit and Guarantees

The Company's financial guarantees consisted of standby letters of credit and bank guarantees. As of December 31, 2015, the Company had $0.7 million of standby letters of credit outstanding primarily related to its credit card facility in Switzerland and, to a lesser extent, performance bond and state requirements imposed on employers. In addition, the Company had $0.4 million bank guarantees outstanding in Israel, primarily related to building leases.

Indemnification

The Company is obligated to indemnify its officers and the members of its Board pursuant to its bylaws and contractual indemnity agreements. The Company also indemnifies some of its suppliers and most of its customers for specified intellectual property matters pursuant to certain contractual arrangements, subject to certain limitations. The scope of these indemnities varies, but, in some instances, includes indemnification for damages and expenses (including reasonable attorneys' fees). There have been no amounts accrued in respect of the indemnification provisions through December 31, 2015.

Royalties

The Company has licensed certain technologies from various companies. It incorporates these technologies into its own products and is required to pay royalties for such use, usually based on shipment of the related products. In addition, the Company has obtained research and development grants under various Israeli government programs that require the payment of royalties on sales of certain products resulting from such research. During the years ended December 31, 2015, 2014 and 2013 royalty expenses were $2.9 million, $3.2 million and $4.4 million, respectively, and they are included in product cost of revenue in the Company's Consolidated Statements of Operations.

Purchase Commitments with Contract Manufacturers and Vendors

The Company relies on a limited number of contract manufacturers and suppliers to provide manufacturing services for a substantial majority of its products. In addition, some components, sub-assemblies and modules are obtained from a sole supplier or limited group of suppliers. During the normal course of business, in order to reduce manufacturing lead times and ensure adequate component supply, the Company enters into agreements with certain contract manufacturers and suppliers that allow them to procure inventory and services based upon criteria as defined by the Company. The Company had $15.3 million of non-cancelable purchase commitments as of December 31, 2015.

NOTE 19: LEGAL PROCEEDINGS

From time to time, the Company is involved in lawsuits as well as subject to various legal proceedings, claims, threats of litigation, and investigations in the ordinary course of business, including claims of alleged infringement of third-party patents and other intellectual property rights, commercial, employment, and other matters. The Company assesses potential liabilities in connection with each lawsuit and threatened lawsuits and accrues an estimated loss for these loss contingencies if both of the following conditions are met: information available prior to issuance of the financial statements indicates that it is probable that a liability has been incurred at the date of the financial statements and the amount of loss can be reasonably estimated. While certain matters to which the Company is a party specify the damages claimed, such claims may not represent reasonably probable losses. Given the inherent uncertainties of litigation, the ultimate outcome of these matters cannot be predicted at this time, nor can the amount of possible loss or range of loss, if any, be reasonably estimated.

In October 2011, Avid Technology, Inc. (“Avid”) filed a complaint in the United States District Court for the District of Delaware alleging that Harmonic’s Media Grid product infringes two patents held by Avid. A jury trial on this complaint commenced on January 23, 2014 and, on February 4, 2014, the jury returned a unanimous verdict in favor of Harmonic, rejecting Avid’s infringement allegations in their entirety. On May 23, 2014, Avid filed a post-trial motion asking the court to set aside the jury’s verdict, and the judge issued an order on December 17, 2014, denying the motion. On January 5, 2015, Avid filed an appeal with respect to the jury’s verdict with the Federal Circuit, which was docketed on January 9, 2015, as Case No. 2015-1246. Avid filed its opening brief with respect to this appeal on March 24, 2015, the Company filed its response brief on May 7, 2015, and Avid filed its reply brief on June 16, 2015. Oral arguments were held on December 11, 2015. On January 29, 2016, the Federal Circuit issued an order vacating the verdict of noninfringement and remanding the case to the trial court for a new trial on infringement. On February 26, 2016, Harmonic filed a request for rehearing and rehearing en banc at the Federal Circuit.

In June 2012, Avid served a subsequent complaint in the United States District Court for the District of Delaware alleging that Harmonic’s Spectrum product infringes one patent held by Avid. The complaint seeks injunctive relief and unspecified damages. On September 25, 2013, the U.S. Patent Trial and Appeal Board (“PTAB”) authorized an inter partes review to be instituted as to claims 1-16 of the patent asserted in this second complaint. A hearing before the PTAB was conducted on May 20, 2014. On July 10, 2014, the PTAB issued a decision finding claims 1-10 invalid and claims 11-16 not invalid. Harmonic filed an appeal with respect to the PTAB’s decision on claims 11-16 on September 11, 2014. The appeal was docketed with the Federal Circuit on October 22, 2014, as Case No. 2015-1072, and Harmonic filed its opening brief with respect to this appeal on January 29, 2015. Avid and PTAB each filed a response brief on April 27, 2015, and the Company filed a reply brief on May 28, 2015. Oral arguments were held on October 8, 2015. The Federal Circuit issued an order on March 1, 2016, affirming the PTAB’s decision. The litigation is currently stayed.

An unfavorable outcome on any litigation matters could require that Harmonic pay substantial damages, or, in connection with any intellectual property infringement claims, could require that the Company pay ongoing royalty payments or could prevent the Company from selling certain of its products. As a result, a settlement of, or an unfavorable outcome on, any of the matters referenced above or other litigation matters could have a material adverse effect on Harmonic’s business, operating results, financial position and cash flows.

NOTE 20: SUBSEQUENT EVENT

TVN Acquisition

On February 11, 2016, pursuant to the terms of the Put Option Agreement, one of our subsidiaries entered into a securities purchase agreement (the “SPA”) with TVN’s shareholders (the “Sellers”) to purchase 100% of the share capital and voting rights of TVN, on a non-diluted basis. On February 29, 2016, the Company completed the acquisition of TVN for total cash consideration of approximately $76.5 million. There may be additional post-closing payments in amounts respectively capped to (i) the difference between €76 million (as converted from euros into U.S. dollars) and $75 million, with respect to an adjustment based on TVN’s 2015 revenue, and (ii) $5 million with respect to an adjustment based on TVN’s 2015 backlog that ships during the first half of 2016, all of which at such times and under the circumstances set forth in the SPA. After paying the

TVN purchase consideration on February 29, 2016, the aggregated balance of the Company's cash, cash equivalents and short-term investments was approximately $70 million.

The initial accounting for this business combination is in progress as of the date of this Form 10-K filing.

SELECTED QUARTERLY FINANCIAL DATA

(UNAUDITED, IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

The following table sets forth our unaudited quarterly Consolidated Statement of Operations data for each of the eight quarters ended December 31, 2015. In management's opinion, the data has been prepared on the same basis as the audited Consolidated Financial Statements included in this report, and reflects all necessary adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of this data.

	Fiscal 2015			
	1st Quarter (3)	2nd Quarter	3rd Quarter (2)	4th Quarter (1)
	(In thousands, except per share amounts)			
Quarterly Data:				
Net revenue	$ 104,016	$ 103,103	$ 83,305	$ 86,603
Gross profit	55,028	54,385	46,231	47,068
Net loss	$ (2,657)	$ (994)	$ (4,811)	$ (7,199)
Net loss per share:				
Basic	$ (0.03)	$ (0.01)	$ (0.05)	$ (0.08)
Diluted	$ (0.03)	$ (0.01)	$ (0.05)	$ (0.08)
Shares used in per share calculations:				
Basic	88,655	88,426	87,991	84,932
Diluted	88,655	88,426	87,991	84,932

	Fiscal 2014			
	1st Quarter	2nd Quarter (1)	3rd Quarter (1) (2)	4th Quarter (1)
	(In thousands, except per share amounts)			
Quarterly Data:				
Net revenue	$ 108,032	$ 109,589	$ 108,061	$ 107,875
Gross profit	52,312	49,817	53,428	56,791
Net income (loss)	$ (5,410)	$ (37,062)	$ 1,078	$ (4,854)
Net income (loss) per share:				
Basic	$ (0.06)	$ (0.39)	$ 0.01	$ (0.06)
Diluted	$ (0.06)	$ (0.39)	$ 0.01	$ (0.06)
Shares used in per share calculations:				
Basic	97,921	93,966	90,618	88,012
Diluted	97,921	93,966	91,800	88,012

(1) A history of operating losses in recent years has led to uncertainty with respect to the Company's ability to realize certain net deferred tax assets, and as a result, the Company recorded increased valuation allowances of $24.5 million, $4.2 million and $0.3 million, in the second, third and fourth quarters of fiscal 2014, respectively, against its U.S. net deferred tax assets. In 2015, the Company continued to record a valuation allowance against all of its U.S. net deferred tax assets, resulting in an increase in valuation allowance of $3.1 million in the fourth quarter of fiscal 2015. This increase in valuation allowance is offset partially by the release of $0.9 million valuation allowance against one of its Israel subsidiaries due to cumulative income generated in recent years.

(2) In the third quarter of fiscal 2015 and 2014, the Company recorded tax benefits of $0.5 million and $9.0 million, respectively, resulting from the expiration of the applicable statute of limitations relating to the tax audits in the U.S. for the years of 2011 and 2010, respectively.

(3) In the first quarter of fiscal 2015, the Company recorded an impairment charge of $2.5 million for its investment in VJU iTV Development GmbH as a result of its assessment that this investment was impaired on an other-than-temporary basis (See Note 5, "Investments in Other Equity Securities," of the notes to our Consolidated Financial Statements for additional information).

Item 9. ***CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE***

None.

Item 9A. ***CONTROLS AND PROCEDURES***

Evaluation of Disclosure Controls and Procedures

We maintain "disclosure controls and procedures," as such term is defined in Rule 13a-15(e) under the Exchange Act, that are designed to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, management recognized that disclosure controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the disclosure controls and procedures are met. Additionally, in designing disclosure controls and procedures, our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures. The design of any disclosure controls and procedures also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

Based on their evaluation as of the end of the period covered by this Annual Report on Form 10-K, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act). Management conducted an assessment of the effectiveness of the Company's internal control over financial reporting based on the criteria set forth in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on the Company's assessment, management has concluded that its internal control over financial reporting was effective as of December 31, 2015. The Company's independent registered public accounting firm, PricewaterhouseCoopers LLP, has issued a report on the effectiveness of the Company's internal control over financial reporting, which appears in Part II, Item 8 of this Form 10-K.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting that occurred during the fourth quarter of fiscal year 2015 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. ***OTHER INFORMATION***

None.

PART III

Certain information required by Part III is omitted from this Annual Report on Form 10-K pursuant to Instruction G to Exchange Act Form 10-K, and the Registrant will file its definitive Proxy Statement for its 2016 Annual Meeting of Stockholders, pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended (the "2016 Proxy Statement"), not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K, and certain information included in the 2016 Proxy Statement is incorporated herein by reference.

Item 10. ***DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE***

The information required by this item will be set forth in the 2016 Proxy Statement and is incorporated herein by reference.

Harmonic has adopted a Code of Business Conduct and Ethics for Senior Operational and Financial Leadership (the "Code"), which applies to its Chief Executive Officer, its Chief Financial Officer, its Corporate Controller and other senior operational and financial management. The Code is available on the Company's website at www.harmonicinc.com.

Harmonic intends to satisfy the disclosure requirement under Form 8-K regarding an amendment to, or waiver from, a provision of this Code of Ethics by posting such information on our website, at the address specified above, and, to the extent required by the listing standards of the NASDAQ Global Select Market, by filing a Current Report on Form 8-K with the Securities and Exchange Commission disclosing such information.

Item 11. *EXECUTIVE COMPENSATION*

The information required by this item will be set forth in the 2016 Proxy Statement and is incorporated herein by reference.

Item 12. *SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS*

Information related to security ownership of certain beneficial owners and security ownership of management and related stockholder matters will be set forth in the 2016 Proxy Statement and is incorporated herein by reference.

Item 13. *CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE*

The information required by this item will be set forth in the 2016 Proxy Statement and is incorporated herein by reference.

Item 14. *PRINCIPAL ACCOUNTING FEES AND SERVICES*

The information required by this item will be set forth in the 2016 Proxy Statement and is incorporated herein by reference.

PART IV

Item 15. *EXHIBITS AND FINANCIAL STATEMENT SCHEDULES*

1. *Financial Statements.* See Index to Consolidated Financial Statements in Item 8 on page 55 of this Annual Report on Form 10-K.

2. *Financial Statement Schedules.* Financial statement schedules have been omitted because the information is not required to be set forth herein, is not applicable or is included in the financial statements or the notes thereto.

3. *Exhibits.* The documents listed in the Exhibit Index of this Annual Report on Form 10-K are filed herewith or are incorporated by reference in this Annual Report on Form 10-K, in each case as indicated therein.

Table of Contents

SIGNATURES

Pursuant to the requirements of Section 13 or 15 (d) of the Securities Exchange Act of 1934, the Registrant, Harmonic Inc., a Delaware corporation, has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Jose, State of California, on March 24, 2016.

HARMONIC INC.

By: /s/ PATRICK J. HARSHMAN
Patrick J. Harshman
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ PATRICK J. HARSHMAN (Patrick J. Harshman)	President & Chief Executive Officer (Principal Executive Officer)	March 24, 2016
/s/ HAROLD L. COVERT (Harold L. Covert)	Chief Financial Officer (Principal Financial and Accounting Officer)	March 24, 2016
/s/ PATRICK GALLAGHER (Patrick Gallagher)	Chairman	March 24, 2016
/s/ E. FLOYD KVAMME (E. Floyd Kvamme)	Director	March 24, 2016
/s/ WILLIAM REDDERSEN (William Reddersen)	Director	March 24, 2016
/s/ SUSAN G. SWENSON (Susan G. Swenson)	Director	March 24, 2016
/s/ MITZI REAUGH (Mitzi Reaugh)	Director	March 24, 2016
/s/ NIKOS THEODOSOPOULOS (Nikos Theodosopoulos)	Director	March 24, 2016

EXHIBIT INDEX

The following Exhibits to this report are filed herewith or, as shown below, are incorporated herein by reference.

Exhibit Number	
2.1(xiii)	Asset Purchase Agreement, dated as of February 18, 2013, by and between Harmonic Inc. and Aurora Networks
3.1(ii)	Certificate of Incorporation of Harmonic Inc., as amended
3.2(xxii)	Amended and Restated Bylaws of Harmonic Inc.
4.1(i)	Form of Common Stock Certificate
4.2(iii)	Certificate of Designation of Rights, Preferences and Privileges of Series A Participating Preferred Stock of Harmonic Inc.
4.3(xxi)	Indenture, dated December 14, 2015, by and between the Company and U.S. Bank National Association
4.4(xxi)	Form of 4.00% Senior Convertible Note due 2020 (included in Exhibit 4.3)
10.1(i)*	Form of Indemnification Agreement
10.2(xii)*	1995 Stock Plan, as amended and restated on June 27, 2012
10.3(iv)*	1999 Non-statutory Stock Option Plan
10.4(xix)*	2002 Director Stock Plan, as amended and restated on June 29, 2015
10.5(xv)*	2002 Employee Stock Purchase Plan
10.6(v)*	Change of Control Severance Agreement between Harmonic Inc. and Patrick Harshman, effective May 30, 2006
10.7(vi)*	Change of Control Severance Agreement between Harmonic Inc. and Neven Haltmayer, effective April 19, 2007
10.8(vii)*	Change of Control Severance Agreement between Harmonic Inc. and Nimrod Ben-Natan, effective April 11, 2008
10.9(viii)*	Harmonic Inc. 2002 Director Stock Plan Restricted Stock Unit Agreement
10.10(viii)	Professional Service Agreement between Harmonic Inc. and Plexus Services Corp., dated September 22, 2003
10.11(viii)	Amendment, dated January 6, 2006, to the Professional Services Agreement for Manufacturing between Harmonic Inc. and Plexus Services Corp., dated September 22, 2003
10.12(viii)	Addendum 1, dated November 26, 2007, to the Professional Services Agreement between Harmonic Inc. and Plexus Services Corp., dated September 22, 2003
10.13(ix)*	Harmonic Inc. 1995 Stock Plan Restricted Stock Unit Agreement
10.14(x)	Lease Agreement between Harmonic Inc. and CRP North First Street, L.L.C. dated December 15, 2009
10.15(xi)*	Omneon Video Networks, Inc. 1998 Stock Option Plan (as amended through February 27, 2007)
10.16(xi)*	Omneon, Inc. 2008 Equity Incentive Plan
10.17(xvii)*	Letter Agreement with Bart Spriester, dated July 29, 2014
10.18(xvii)*	Change of Control Severance Agreement between Harmonic Inc. and Bart Spriester, effective September 10, 2014
10.19(xvi)	Credit Agreement dated December 22, 2014, between Harmonic Inc. and JPMorgan Chase Bank, N.A.
10.20(xiv)	Amendment No. 3 to Loan Agreement between Harmonic Inc. and Silicon Valley Bank
10.21(xviii)*	Offer Letter Agreement with Harold Covert, dated October 22, 2015

10.22(xviii)*	Change of Control Severance Agreement between Harmonic Inc. and Harold Covert, dated October 27, 2015
10.23 (xx)	First Amendment to Credit Agreement, dated as of December 7, 2015, by and between Harmonic Inc. and JPMorgan Chase Bank, N.A.
10.24 (xx)	Purchase Agreement, dated as of December 8, 2015, by and between Harmonic Inc. and Merrill Lynch, Pierce, Fenner & Smith Incorporated
10.25	Put Option Agreement, dated as of December 7, 2015, by and between Harmonic Inc. and Mr. Eric Louvet, Mr. Eric Gallier, Mr. Jean-Marc Guiot, Mr. Claude Perron, Mrs. Crystele Trévisan-Jallu, Mrs. Delphine Sauvion, Mr. Marc Procureur, Mr. Christophe Delahousse, Mr. Hervé Congard, Mr. Arnaud de Puyfontaine, FPCI Winch Capital 3, Montalivet Networks and FPCI CIC Mezzanine 3
10.26	Securities Purchase Agreement, dated as of February 11, 2016, by and between Harmonic International AG and Mr. Eric Louvet, Mr. Eric Gallier, Mr. Jean-Marc Guiot, Mr. Claude Perron, Mrs. Crystele Trévisan-Jallu, Mrs. Delphine Sauvion, Mr. Marc Procureur, Mr. Christophe Delahousse, Mr. Hervé Congard, Mr. Arnaud de Puyfontaine, FPCI Winch Capital 3, Montalivet Networks and FPCI CIC Mezzanine 3 for the acquisition of Thomson Video Networks
21.1	Subsidiaries of Harmonic Inc.
23.1	Consent of Independent Registered Public Accounting Firm
31.1	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101	The following materials from Registrant's Annual Report on Form 10-K for the year ended December 31, 2015, formatted in Extensible Business Reporting Language (XBRL): Consolidated Balance Sheets at December 31, 2015 and December 31, 2014; (ii) Consolidated Statements of Operations for the Years Ended December 31, 2015, December 31, 2014 and December 31, 2013; (iii) Consolidated Statements of Comprehensive Income (Loss) for the Years Ended December 31, 2015, December 31, 2014 and December 31, 2013 (iv) Consolidated Statements of Stockholders' Equity for the Years Ended December 31, 2015, December 31, 2014 and December 31, 2013, (v) Consolidated Statements of Cash Flows for the Years Ended December 31, 2015, December 31, 2014 and December 31, 2013; and (vi) Notes to Consolidated Financial Statements.

* Indicates a management contract or compensatory plan or arrangement relating to executive officers or directors of the Company.

(i) Previously filed as an Exhibit to the Company's Registration Statement on Form S-1 No. 33-90752.

(ii) Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the year ended December 31, 2001.

(iii) Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated July 25, 2002.

(iv) Previously filed as an Exhibit to the Company's Current Report on Form S-8 dated June 5, 2003.

(v) Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated May 31, 2006.

(vi) Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated April 19, 2007.

(vii) Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated April 16, 2008.

(viii) Previously filed as an Exhibit to the Company's Current Annual Report on Form 10-K for the year ended December 31, 2008.

(ix) Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q for the quarter ended April 3, 2009.

(x) Previously filed as an Exhibit to the Company’s Current Report on Form 8-K dated December 18, 2009.

(xi) Previously filed as an Exhibit to the Company’s Registration Statement on Form S-8 dated September 21, 2010.

(xii) Previously filed as an Exhibit to the Company’s Registration Statement on Form S-8, dated July 30, 2012.

(xiii) Previously filed as an Exhibit to the Company’s Current Report on Form 8-K dated March 11, 2013.

(xiv) Previously filed as an Exhibit to the Company’s Current Report on Form 10-Q for the quarter ended September 26, 2014.

(xv) Previously filed as an Exhibit to the Company’s Registration Statement on Form S-8 dated November 7, 2014.

(xvi) Previously filed as an Exhibit to the Company’s Current Report on Form 8-K dated December 19, 2014.

(xvii) Previously filed as an Exhibit to the Company’s Annual Report on Form 10-K for the year ended December 31, 2014.

(xviii) Previously filed as an Exhibit to the Company’s Current Report on Form 8-K dated October 21, 2015.

(xix) Previously filed as an Exhibit to the Company’s Registration Statement on Form S-8 dated November 6, 2015.

(xx) Previously filed as an Exhibit to the Company’s Current Report on Form 8-K dated December 7, 2015.

(xxi) Previously filed as an Exhibit to the Company’s Current Report on Form 8-K dated December 14, 2015.

(xxii) Previously filed as an Exhibit to the Company’s Quarterly Report on Form 10-Q for the quarter ended April 3, 2015.

EXHIBIT 10.25

Harmonic Inc.
4300 North First Street
San Jose, CA 95134
T +1 408 542 2500
F +1 408 542 2511
www.harmonicinc.com

STRICTLY CONFIDENTIAL

December 7, 2015

For the attention of each of the Persons identified in Schedule 0 hereto
(hereinafter collectively referred to as the "Sellers")

Re: Offer to Purchase

Dear Sirs:

Capitalized terms used in this letter (the "Letter") shall, unless otherwise defined herein, have the meanings ascribed to them in the sale and purchase agreement in the final and agreed form (together with its own schedules, appendices and exhibits) attached hereto as Schedule 1 (the "Securities Purchase Agreement").

Following our recent discussions in relation to the acquisition of all (and not less than all) of the Transferred Securities (the "Transaction"), we hereby submit the following irrevocable and binding offer (*promesse unilatérale d'achat*) which the Sellers' Representative (on behalf of all the Sellers) may, at the Sellers' sole discretion, elect to accept in accordance with the procedures and subject to the terms set out below, and whereby:

- we (the "Offeror"), irrevocably and subject to the terms and conditions set out below (and, in particular, subject to the terms of Clauses 3(b), 9(b) and 12), undertake to procure that Harmonic Europe, a company (*société par actions simplifiée*) organized under the laws of France, having a share capital of €40,000 and its registered office at 50, rue Camille Desmoulins, 92130 Issy-les-Moulineaux (France), and registered with the French Registry of Commerce and Companies under number 410 618 748 RCS Nanterre ("Harmonic Europe"), which is one of our Affiliates, acquires, and

- Harmonic Europe, irrevocably and subject to the terms and conditions set out below (and, in particular, subject to the terms of Clauses 3(b), 9(b) and 12), undertakes to acquire,

in accordance with, and subject to, the terms and conditions of the Securities Purchase Agreement, all (and not less than all) of the Transferred Securities, free and clear from all Liens, from the Sellers (the "Put Option");

it being expressly specified and agreed by the parties to this Letter that the Offeror and Harmonic Europe may at any time during the period from the date hereof until (and including) the actual date of execution of the Securities Purchase Agreement (or, failing the delivery of an Exercise Notice, the Expiry Date, or, in case of termination of this Letter in accordance with the provisions of Clauses 3(b), 9(b) and 12, the date of receipt by the Sellers' Representative of the termination notice served by the Offeror) jointly notify the Sellers' Representative of their decision to substitute any other Affiliate of the Offeror, including any new company incorporated by the Offeror or any Affiliate of the Offeror for that purpose, for Harmonic Europe for purposes of (i) this Letter, (ii) the signature of the Securities Purchase Agreement as "Purchaser" (as defined under the Securities Purchase Agreement) and therefore (iii) the completion of the Transaction, Harmonic Europe or such other existing or newly formed Affiliate of the Offeror being hereinafter referred to as the "Purchaser".

1. **DURATION AND EXERCISE OF THE PUT OPTION**

(a) The Put Option enters into force on the date hereof simultaneously with the countersignature of this Letter by all the Sellers and Kepler M2, a company (*société par actions simplifiée*) organized under the laws of France, having a share capital of €3,635,805 and its registered office at 15, rue Trébois, 92300 Levallois-Perret (France), and registered with the French Registry of Commerce and Companies under number 531 550 242 RCS Nanterre ("Kepler M2"), and will remain valid until the earlier of the following dates (the "Expiry Date"):

(i) 8:00 pm, Paris time, the tenth (10th) Business Day after the date (such latter date being hereinafter referred to as the "Exercise Period Opening Date") on which the TVN's works' council (*comité d'entreprise*) (a) will have given its express opinion on the Transaction or (b) in the absence of such express opinion, will have been deemed pursuant to applicable Laws to have rendered its opinion, as the case may be; and

(ii) 8:00 pm, Paris time, March 31, 2016.

(b) Subject to Clauses 13(e), 13(f), 17 through 19 and 22, the Put Option and this Letter will automatically terminate as at the Expiry Date, unless (i) the Put Option is exercised in accordance with Clauses 1(c) and 13 below or (ii) the Sellers' Representative (on behalf of all the Sellers) and the Offeror mutually and expressly agree in writing to postpone the Expiry Date after the execution of this Letter.

(c) This Put Option may be exercised by the Sellers' Representative (on behalf of all the Sellers) in accordance with the provisions of Clause 13, between the Exercise Period Opening Date (included) and the Expiry Date (included).

2. **FINAL PRICE**

(a) The final purchase price to be paid by the Purchaser to the Sellers for all (and not less than all) of the Transferred Securities (the "Final Price") shall be the result of the aggregation of the Adjusted Initial Price and of the Additional Price, as defined below:
The "Adjusted Initial Price" shall be:

(i) US Dollars 75,000,000 (seventy five millions) (the "Enterprise Value");

(ii) adding the amount of Net Cash (if such amount is positive), as converted from Euros into US Dollars by using the Closing Exchange Rate, or subtracting the absolute value of the amount of Net Cash (if such amount is negative), as converted from Euros into US Dollars by using the Closing Exchange Rate;

(iii) adding the amount of the Working Capital Adjustment, as converted from Euros into US Dollars by using the Closing Exchange Rate, corresponding to (a) an increase of the amount of the Adjusted Initial Price if this amount is positive and (b) a decrease of the amount of the Adjusted Initial Price if this amount is negative;

(iv) adding the amount of ManCo Net Cash (if such amount is positive), as converted from Euros into US Dollars by using the Closing Exchange Rate, or subtracting the absolute value of the amount of ManCo Net Cash (if such amount is negative), as converted from Euros into US Dollars by using the Closing Exchange Rate; and

(v) adding the amount of the ManCo Working Capital Adjustment, as converted from Euros into US Dollars by using the Closing Exchange Rate, corresponding to (a) an

increase of the amount of the Adjusted Initial Price if this amount is positive and (b) a decrease of the amount of the Adjusted Initial Price if this amount is negative.

The "Additional Price" shall be the sum of:

(i) the Revenues Adjustment, if any; and

(ii) the Backlog Adjustment, if any.

(b) On the Closing Date, the Purchaser shall pay in accordance with the provisions of the Securities Purchase Agreement the "Estimated Initial Price", which shall be equal to:

(i) the Enterprise Value,

(ii) plus the Estimated Net Cash (if positive), as converted from Euros into US Dollars by using the Pre-Closing Exchange Rate, or minus the absolute value of the Estimated Net Cash (if negative), as converted from Euros into US Dollars by using the Pre-Closing Exchange Rate;

(iii) plus the Estimated Working Capital Adjustment, as converted from Euros into US Dollars by using the Pre-Closing Exchange Rate, corresponding to (a) an increase of the amount of the Estimated Initial Price if this amount is positive and (b) a decrease of the amount of the Estimated Initial Price if this amount is negative;

(iv) plus the Estimated ManCo Net Cash (if positive), as converted from Euros into US Dollars by using the Pre-Closing Exchange Rate, or minus the absolute value of the Estimated ManCo Net Cash (if negative), as converted from Euros into US Dollars by using the Pre-Closing Exchange Rate; and

(v) plus the Estimated ManCo Working Capital Adjustment, as converted from Euros into US Dollars by using the Pre-Closing Exchange Rate, corresponding to (a) an increase of the amount of the Estimated Initial Price if this amount is positive and (b) a decrease of the amount of the Estimated Initial Price if this amount is negative.

(c) The Adjusted Initial Price shall be finally determined and the Initial Price Adjustment, if any, paid after the Closing Date in accordance with the provisions of the Securities Purchase Agreement.

(d) The Revenues Adjustment (if any) and the Backlog Adjustment (if any) shall be determined and paid after the Closing Date in accordance with the provisions of the Securities Purchase Agreement.

(e) The allocation among the Sellers of the Final Price and of the Estimated Initial Price, the Initial Price Adjustment, the Revenues Adjustment and the Backlog Adjustment shall be made in accordance with the provisions of Section 2.9 of the Securities Purchase Agreement under the sole and exclusive responsibility of the Sellers and the Purchaser and the Target Companies shall incur no liability whatsoever in respect thereto.

3. FINANCING

(a) Subject to Clause 3(b), the Offeror undertakes to procure that as of the Closing Date, the Purchaser will have immediately available, on an unconditional basis, the sufficient cash resources required to proceed with the payment of the Closing Payments and of any expenses incurred by or on behalf of the Purchaser in connection with the transactions contemplated by the Securities Purchase Agreement.

(b) In the event that the Offeror is not able to obtain a written commitment for at least one hundred million US Dollars ($100,000,000) of financing within three (3) Business Days following the public announcement of the Transaction by the Offeror and in any case by no later than December 10, 2015 (PST), for any reason whatsoever, the Offeror may elect, without incurring any liability whatsoever in such respect, notwithstanding any provisions to the contrary in this Letter and provided, however, that the Offeror complies with its obligations under Clause 3(c), which the parties to this Letter expressly acknowledge and agree, to terminate this Letter (subject to Clauses 3(c), 13(f), 17 through 19 and 22, which shall survive such termination) upon written notice served by the Offeror to the Sellers' Representative, such notice to be served no later than December 10, 2015 (PST).

(c) Should the Offeror, as is its right, decide to terminate this Letter pursuant to Clause 3(b) above, and provided that (i) the Sellers have complied with all of their material obligations hereunder (including, but not limited to, the obligation to serve in due time the Break-Up Fee Notice) and (ii) the Offeror has not been able to obtain a written commitment for at least one hundred million US Dollars ($100,000,000) of financing within three (3) Business Days following the public announcement of the Transaction by the Offeror and in any case by no later than December 10, 2015 (PST) for any reason whatsoever other than any event, change, occurrence, circumstance, effect, state of affairs or fact which constitutes a Material Adverse Change, the Offeror hereby undertakes to pay or to procure that any of its Affiliate pays, within thirty (30) calendar days of the date of receipt by the Offeror of the Break-Up Fee Notice, a five millions Euros (€5,000,000) break-up fee (the "Break-Up Fee") to the Sellers, by wire transfer of immediately available Euro funds to such accounts of the Sellers as shall have been notified to the Offeror by the Sellers' Representative for such purpose within five (5) Business Days of the date of receipt by the Sellers' Representative of the termination notice served by the Offeror in accordance with Clause 3(b), together with the allocation of the amount of the Break-Up Fee among the Sellers (the "Break-Up Fee Notice"). Such allocation shall be made under the sole and exclusive responsibility of the Sellers and the Offeror and its Affiliates shall incur no liability in respect thereto.

The parties to this Letter expressly acknowledge and agree that notwithstanding anything to the contrary in this Letter, should the Offeror, as is its right, decide to terminate this Letter pursuant to Clause 3(b) above, (i) the provisions of this Clause 3(c) shall survive such termination and (ii) the Break-Up Fee shall be the exclusive remedy of the Sellers against the Offeror in respect of such termination.

4. INFORMATION AND CONSULTATION OF THE TVN's WORKS' COUNCIL

(a) We acknowledge that no exercise of the Put Option by the Sellers' Representative (on behalf of all the Sellers) can in any event ever take place without the TVN's works' council (*comité d'entreprise*) first being informed and consulted in respect of the Transaction and delivering its opinion on such Transaction or being deemed to have done so pursuant to applicable Laws (the "Information and Consultation Process").

(b) The Sellers undertake (i) to procure that (*x*) an information meeting of the TVN's work's council be held on December 11, 2015 (the "Information Meeting"), (*y*) the information document (entitled "*economical note*") relating to the Transaction be provided to the TVN's work's council no later than during the Information Meeting and (*z*) that the first meeting of the Information and Consultation Process be held during the week of December 14, 2015 and the TVN's work's council be convened in timely manner by TVN to such effect, (ii) to keep us regularly informed of the progress of the Information and Consultation Process and (iii) to procure that TVN conducts the Information and Consultation Process diligently.

(c) In respect of the Information and Consultation Process, the Offeror undertakes to:

(i) deliver to the Sellers' Representative and TVN any reasonable information relating to the Offeror and, where applicable, its Affiliates (including the Purchaser), as may be reasonably requested by the TVN's works' council;

(ii) provide, to the extent practicable, timely answers to any reasonable question relevant to the Transaction submitted to the Offeror by TVN in connection with the Information and Consultation Process; and

(iii) procure the appropriate authorized representatives of the Offeror selected by us to attend the meetings of the TVN's works' council convened in connection with the Information and Consultation Process or meet with the relevant employees and employee representatives where and when reasonably requested by the Sellers' Representative and/or TVN.

(d) Each of the parties to this Letter undertakes to provide the other parties with all reasonable assistance in connection with the Information and Consultation Process, including but not limited to, in respect of the preparation of the information and documents required for the Information Meeting. The parties to this Letter understand and acknowledge the importance of their diligent, professional and timely participation in the Information and Consultation Process. Nevertheless, the Sellers acknowledge that under no circumstances shall the Offeror (which is listed) and its Affiliates (including the Purchaser) or Connected Persons be obliged to provide any private or confidential information.

(e) The Sellers' Representative shall promptly give notice to the Offeror and the Purchaser of the full completion of the Information and Consultation Process and provide them with any evidence thereof, and in any event within two (2) Business Days of becoming aware of the same.

5. COMPLIANCE WITH "HAMON LAW"

(a) The Sellers undertake to procure that the Holding complies with its information obligation under article L. 23-10-1 *et seq.* of the French Commercial Code as soon as practicable, and in any event no later than December 11, 2015.

(b) Mr. Procureur, as sole employee of the Holding as of the date hereof, undertakes to notify in accordance with applicable Laws the Holding of his irrevocable decision not to make an acquisition offer with respect to the Holding as soon as practicable from the satisfaction by the Holding of its information obligation under article L. 23-10-1 *et seq.* of the French Commercial Code, and in any event no later than December 11, 2015.

(c) The Sellers' Representative shall promptly give notice to the Offeror and the Purchaser that the provisions of this Clause 5 have been definitively complied with and provide them with any evidence thereof, and in any event within two (2) Business Days of becoming aware of the same.

6. FMEF CLEARANCE

(a) Each of the parties to this Letter acknowledges the importance that the Condition Precedent set out in Section 3.1(a) of the Securities Purchase Agreement be fulfilled as soon as possible and the Sellers confirm that they are not aware of any reason that may prevent the obtaining of the FMEF Clearance on or prior to the Long Stop Date.

(b) The Offeror agrees to:

(i) as soon as possible after the date hereof and in any event no later than December 18, 2015 and at its own expense, make relevant filings or pre-filings and contacts with the French Ministry for the Economy and Finance with respect to the Transaction in order to obtain the FMEF Clearance, within any terms provided by applicable Laws, and supply promptly any additional information and documentary material that may be requested by the French Ministry for the Economy and Finance;

(ii) keep the Sellers' Representative regularly informed of the processing of these filings or pre-filings and inform promptly the Sellers' Representative if it becomes aware of anything that could result in the FMEF Clearance being delayed or denied;

(iii) promptly provide the Sellers' Representative with the relevant (non-privileged or non-commercially sensitive) documents concerning the filings or pre-filings referred to above, together with any and all additional (including documentary) material that may be requested by the French Ministry for the Economy and Finance in connection with the FMEF Clearance (subject to confidential information contained therein), provided, in each case, that such documents and additional material relate to, or include information about, the Target Companies prior to Closing, and use its commercially reasonable endeavors to, prior to any such filings or pre-filings with, and communications to, the French Ministry for the Economy and Finance, (a) give to the Sellers' Representative a reasonable opportunity to discuss the content of such documents and additional material and (b) take into account its reasonable comments and suggestions;

(iv) give to the Sellers' Representative the opportunity to participate in any meeting for which its presence is required by the French Ministry for the Economy and Finance; and

(v) use its commercially reasonable endeavors in order to obtain the FMEF Clearance.

(c) The Sellers acknowledge that the above mentioned filings or pre-filings will require the cooperation and supply of information by the Target Companies and agree to co-operate and to cause the relevant Target Companies to co-operate with the Offeror, upon its reasonable request, in providing promptly to the Offeror and its advisors such assistance as may be reasonably necessary for the Offeror to make the relevant filings or pre-filings and obtain the FMEF Clearance, including but not limited to, in respect of the preparation of the information and documents and/or of the attendance to any meeting that may be required in this context.

(d) The Offeror (until the actual date of execution of the Securities Purchase Agreement (excluded)) or the Purchaser (from the actual date of execution of the Securities Purchase Agreement (included)) shall promptly give notice to the Sellers' Representative of the satisfaction of the Condition Precedent specified in Section 3.1(a) of the Securities Purchase Agreement and in any event within two (2) Business Days of becoming aware of the same.

7. REQUIRED FINANCIALS

(a) The Sellers acknowledge the importance for the Offeror that the Condition Precedent set out in Section 3.1(b) of the Securities Purchase Agreement be fulfilled as soon as possible and confirm that they are not aware of any reason that may prevent the delivery of the Required Financials on or prior to the Long Stop Date.

(b) The Sellers agree to:

(i) as soon as possible after the date hereof and in any event no later than December 18, 2015, cause the Required Financials to be prepared and audited by such internationally recognized independent accounting firm as shall have been chosen by the Offeror for such purpose and supply promptly, or cause to be promptly supplied, any information and documentary material that may be requested by such independent accounting firm;

(ii) keep the Offeror regularly informed of the processing of the preparation and audit of the Required Financials and inform promptly the Offeror if they become aware of anything that could result in the delivery of the Required Financials being delayed or compromised; and

(iii) promptly provide the Offeror, upon its request, with any information and documentary material used in, or necessary for, the preparation and audit of the Required Financials, and with any information and documentary material that may be requested by the independent accounting firm.

(c) The Sellers agree to do all reasonable things necessary or appropriate under applicable Laws to deliver the Required Financials to the Purchaser on or prior to the Long Stop Date.

(d) The Offeror acknowledges that the delivery of the Required Financials will require cooperation and agrees to co-operate with the Sellers, upon the reasonable request of the Sellers' Representative, in providing promptly to the Sellers such assistance as may be reasonably necessary for the Sellers to deliver the Required Financials, including but not limited to, by making a reasonable number of expert consultants available to the Sellers to contribute to the preparation and audit of the Required Financials.

8. IP RECOVERY

(a) The Sellers acknowledge the importance for the Offeror and the Purchaser that the Condition Precedent set out in Section 3.1(c) of the Securities Purchase Agreement be fulfilled on the Closing Date, prior to Closing, and confirm that they are not aware of any reason that may prevent (i) the execution of the IP Agreement without any further delay and (ii) the full completion of the IP Recovery on or prior to the Long Stop Date.

(b) The Sellers agree to:

(i) as soon as possible after the date hereof and in any event prior to the delivery of any Exercise Notice, procure that the IP Agreement be executed by Kepler and France Brevets;

(ii) on the Closing Date and prior to Closing, procure that the Notice of Voluntary Termination (as defined under the IP Agreement) be delivered by Kepler to France Brevets and received by the latter, such Notice of Voluntary Termination to include any notice by Kepler of its decision (*x*) to use its right of designation of a Designated Transferee (as defined under the IP Agreement) under article 8 of the IP Agreement, provided and only in the event that the Sellers' Representative receives an IP Substitution Notice at least five (5) Business Days prior to the Closing Date, and (*y*) to designate such Entity as mentioned in the IP Substitution Notice for such purpose;

(iii) on the Closing Date and prior to Closing, procure that the Transfer Price (as defined under the IP Agreement) be paid by Kepler to France Brevets by wire transfer of

immediately available funds to the bank account indicated for such purpose in the IP Agreement;

(iv) on the Closing Date and prior to Closing, deliver to the Purchaser two (2) original copies of the Assignment of Patent Rights dated as of the Closing Date to be entered into by and between France Brevets and Kepler (or such Entity as indicated in the IP Substitution Notice) duly signed by France Brevets; and

(v) keep the Offeror and the Purchaser regularly informed of the execution of the IP Agreement and of the processing of the IP Recovery and inform promptly the Offeror and the Purchaser if they become aware of anything that could result in the execution of the IP Agreement and/or the full completion of the IP Recovery being delayed or compromised.

(c) The Sellers agree to do all reasonable things necessary or appropriate under applicable Laws to procure that the IP Recovery be fully completed on or prior to the Long Stop Date.

(d) The Sellers' Representative shall promptly give notice to the Offeror and the Purchaser of the execution of the IP Agreement and in any event within two (2) Business Days of becoming aware of the same, such notice to include a certified copy of the IP Agreement duly executed by Kepler and France Brevets.

9. NOTIFICATIONS

(a) During the period from the date of this Letter (included) to the actual date of execution of the Securities Purchase Agreement (or, failing the delivery of an Exercise Notice, the Expiry Date, or, in case of termination of this Letter in accordance with the provisions of Clauses 3(b), 9(b) and 12, the date of receipt by the Sellers' Representative of the termination notice served by the Offeror), the Sellers' Representative shall promptly notify the Offeror and the Purchaser of the occurrence (or non-occurrence) of any event, the occurrence (or non-occurrence) of which constitutes or would be likely to constitute:

(i) a breach or inaccuracy of any representations and warranties to be made by the Sellers under Section 8 of the Securities Purchase Agreement; or

(ii) a Material Adverse Change;

such notice by the Sellers' Representative to include (i) all relevant details to provide disclosure as complete and fair as possible to the Offeror and the Purchaser of such development and (ii) if applicable, an updated version of any impacted Schedule to the Securities Purchase Agreement.

(b) In the event that the Offeror and the Purchaser are notified pursuant to paragraph (a) above of the occurrence (or non-occurrence) of an event, the occurrence (or non-occurrence) of which constitutes a Material Adverse Change, the Offeror may elect, without incurring any liability whatsoever in such respect, notwithstanding any provisions to the contrary in this Letter, which the parties to this Letter expressly acknowledge and agree, to terminate this Letter (subject to Clauses 13(f), 17 through 19 and 22, which shall survive such termination) upon written notice served to the Sellers' Representative.

10. PERMITTED TRANSFERS PRIOR TO SIGNING

(a) During the period from the date of this Letter (included) to the date of delivery of an Exercise Notice (or, failing the delivery of an Exercise Notice, the Expiry Date, or, in case of termination of this Letter in accordance with the provisions of Clauses 3(b), 9(b) and 12,

the date of receipt by the Sellers' Representative of the termination notice served by the Offeror), each of Mr. Delahousse and Mr. Congard shall be entitled to proceed with the following transfers of Ordinary Shares he owns on the date hereof, within the limit of 604,226 Ordinary Shares for Mr. Delahousse and within the limit of 725,026 Ordinary Shares for Mr. Congard (the "Permitted Transfers"):

(i) a contribution in kind to an Entity having the following characteristics from the date of completion of the contribution in kind (included) to the Closing Date (included) (a "Personal Holding"): (*w*) being a French *société par actions simplifiée*, (*x*) being wholly owned by him, (*y*) the only legal representative of which being himself and (*z*) with no other assets (except for cash) and no financial debts or liabilities towards third parties (except with respect to incorporation and registration costs); and/or

(ii) donations to his spouse and/or first-degree adult descendants (*descendants au premier degré majeurs*) (the "Beneficiaries");

provided, however, that:

(i) such Permitted Transfers are made in compliance with the provisions of the Holding's by-laws, the applicable Existing Shareholders' Documents and the terms and conditions of the OBSAs, or the relevant waivers are duly obtained prior to their completion; and

(ii) such Permitted Transfers are fully completed prior to the date of delivery of an Exercise Notice; and

(iii) prior and as a condition to the completion of any such Permitted Transfer, the relevant Personal Holding or Beneficiary irrevocably undertakes towards all the parties to this Letter, subject to the sending by the Sellers' Representative of an Exercise Notice between the Exercise Period Opening Date (included) and the Expiry Date (included) and subject to the terms of this Letter (and, in particular, subject to the terms of Clauses 3(b), 9(b) and 12), to execute the Securities Purchase Agreement on the Signing Date, at the time and location specified in the Exercise Notice, or at such other time and/or location as may be agreed upon in writing by the Sellers' Representative and the Offeror prior to or on the Signing Date; and

(iv) the documentation relating to any such Permitted Transfer provides that:

(A) the relevant Personal Holding (i) irrevocably undertakes to promptly transfer back to, where applicable, Mr. Delahousse or Mr. Congard, the Ordinary Shares transferred to it, should it cease for any reason whatsoever to qualify as Personal Holding under this Letter, (ii) acknowledges and agrees that forced execution (*exécution forcée*) of this obligation may be requested and (iii) irrevocably waives its rights under article 1142 of the French Civil Code; and

(B) the relevant Personal Holding or Beneficiary (i) irrevocably undertakes to promptly transfer back to, where applicable, Mr. Delahousse or Mr. Congard, the Ordinary Shares transferred to it, should it not proceed with the execution of the Securities Purchase Agreement, as to be updated prior to its execution to take into account the completion of any such Permitted Transfer, on the Signing Date, at the time and location specified in the Exercise Notice, or at such other time and/or location as may be agreed upon in writing by the Sellers' Representative and the Offeror prior to or on the Signing Date, (ii) acknowledges and agrees that forced execution (*exécution forcée*) of this

obligation may be requested and (iii) irrevocably waives its rights under article 1142 of the French Civil Code; and

(C) the relevant Personal Holding or Beneficiary (i) irrevocably undertakes to promptly transfer back to, where applicable, Mr. Delahousse or Mr. Congard, the Ordinary Shares transferred to it, should it not comply with any of its obligations under the Securities Purchase Agreement, as to be updated prior to its execution to take into account the completion of any such Permitted Transfer, (ii) acknowledges and agrees that forced execution (*exécution forcée*) of this obligation may be requested and (iii) irrevocably waives its rights under article 1142 of the French Civil Code; <u>and</u>

(v) upon consummation of, and as a condition to, any such Permitted Transfer, the relevant Personal Holding or Beneficiary executes and delivers in accordance with Clause 19 below, to each party to this Letter an accession agreement, pursuant to which it adheres to this Letter with the same rights and obligations as, where applicable, Mr. Delahousse (save for his rights and obligations in his quality as Sellers' Representative) and Mr. Congard (save for his rights and obligations in his quality as Sellers' Representative, should Mr. Delahousse be unable to perform his duties in acting as the Sellers' Representative for any reason whatsoever) for purposes of this Letter, and such Personal Holding or Beneficiary will thereafter be deemed to be a party to this Letter with the same rights and obligations as, where applicable, Mr. Delahousse (save for his rights and obligations in his quality as Sellers' Representative) or Mr. Congard (save for his rights and obligations in his quality as Sellers' Representative, should Mr. Delahousse be unable to perform his duties in acting as the Sellers' Representative for any reason whatsoever) for purposes of this Letter; <u>and</u>

(vi) the Securities Purchase Agreement, as to be updated prior to its execution to take into account the completion of any such Permitted Transfer, shall include a provision stating that each of Mr. Delahousse and Mr. Congard is acting severally and jointly (*conjointement et solidairement*) with his Personal Holding and/or Beneficiaries for purposes of the Securities Purchase Agreement;

all the above in a form, manner and content satisfactory to the Offeror; <u>and</u>

<u>provided</u> always that:

the Offeror is notified by the Sellers' Representative of any such contemplated Permitted Transfer at least fifteen (15) Business Days prior to its completion, and provided in a timely manner with the draft documentation relating thereto, so as to allow it to review and comment on it prior to its signature. In such respect, each of Mr. Delahousse and Mr. Congard undertakes to provide the Offeror with the draft documentation relating to any such contemplated Permitted Transfer in a timely manner, and the parties to this Letter (other than the Offeror and Harmonic Europe) undertake to provide promptly the Offeror with any and all such documents as may be needed by the Offeror to perform its review.

(b) Should a Personal Holding cease for any reason whatsoever to qualify as Personal Holding under this Letter (A), or should a Personal Holding or Beneficiary not proceed with the execution of the Securities Purchase Agreement, as to be updated prior to its execution to take into account the completion of any such Permitted Transfer, on the Signing Date, at the time and location specified in the Exercise Notice, or at such other time and/or location as may be agreed upon in writing by the Sellers' Representative and the Offeror prior to or on the Signing Date (B), or should a Personal Holding or Beneficiary not comply with any of its obligations under the Securities Purchase Agreement, as to be updated prior to its execution to

take into account the completion of any such Permitted Transfer (C), each of Mr. Delahousse or Mr. Congard, where applicable, hereby undertakes, as to (A) above, to notify immediately the other parties to this Letter of the same, and as to (A), (B) and (C) above, to repurchase all the Ordinary Shares transferred to the said Personal Holding or Beneficiary, acknowledges and agrees that forced execution (*exécution forcée*) of this last obligation may be requested and irrevocably waives its rights under article 1142 of the French Civil Code. Each of Mr. Delahousse and Mr. Congard hereby agrees to act severally and jointly (*conjointement et solidairement*) with his Personal Holding and/or Beneficiaries for purposes of this Letter from the date of execution by the latter of any accession agreements pursuant to which they adhere to this Letter.

11. PERMITTED AMENDMENTS TO SCHEDULE 4.3(a)(iv) TO THE SECURITIES PURCHASE AGREEMENT

(a) Within two (2) Business Days of the receipt of an Exercise Notice, the Offeror may notify to the Sellers' Representative a revised version of Schedule 4.3(a)(iv) to the Securities Purchase Agreement, provided, however, that such revised version (i) only includes modifications with respect to the legal representatives, officers, directors, members of a board, committee or other corporate body of the Target Companies other than Kepler M2, Financière Kepler, Kepler and TVN, and therefore (ii) takes over the content of Schedule 4.3(a)(iv) to the Securities Purchase Agreement as appended as of the date hereof with respect to the legal representatives, officers, directors, members of a board, committee or other corporate body of Kepler M2, Financière Kepler, Kepler and TVN, it being expressly specified, for the avoidance of doubt, that such revised version may include modifications with respect to any offices Mr. Delahousse and Mr. Congard may have within the Target Companies other than Kepler M2, Financière Kepler, Kepler and TVN, which the parties to this Letter expressly acknowledge and agree. Such revised version of Schedule 4.3(a)(iv) to the Securities Purchase Agreement shall be hereinafter referred to as the "New Schedule 4.3(a)(iv)".

(b) Should the Offeror notify to the Sellers' Representative a New Schedule 4.3(a)(iv) within the above-mentioned timeframe, such New Schedule 4.3(a)(iv) shall, with effect from (and including) the date of such notice, automatically supersede Schedule 4.3(a)(iv) to the Securities Purchase Agreement as appended as of the date hereof, so that any reference to Schedule 4.3(a)(iv) to the Securities Purchase Agreement shall be construed as a reference to the New Schedule 4.3(a)(iv), which the parties to this Letter expressly acknowledge and agree. With effect from (and including) the date of such notice, Schedule 4.3(a)(iv) to the Securities Purchase Agreement as appended as of the date hereof shall be modified, restated and replaced in its entirety by New Schedule 4.3(a)(iv), which the parties to this Letter expressly acknowledge and agree.

(c) The parties to this Letter hereby agree that should the Offeror notify to the Sellers' Representative a New Schedule 4.3(a)(iv) within two (2) Business Days of the receipt of an Exercise Notice, such New Schedule 4.3(a)(iv) shall be appended to the execution version of the Securities Purchase Agreement on the Signing Date.

12. CONDITIONS PRECEDENT TO SIGNING

(a) The obligations of the Offeror and the Purchaser under the Put Option shall be subject to the fulfillment or waiver (in whole or in part) by the Offeror on the Signing Date at the latest of the following conditions (the "Conditions Precedent to Signing"):

(i) a written commitment for at least one hundred million US Dollars ($100,000,000) of financing shall have been obtained by the Offeror on the earlier of (*x*) the expiry of a three (3)-Business Day period following the public announcement of the Transaction

by the Offeror and in any case no later than December 10, 2015 (PST) and (*y*) the date of the Exercise Notice;

(ii) the IP Agreement shall have been duly executed by Kepler and France Brevets and a certified copy of the IP Agreement duly executed by Kepler and France Brevets shall have been provided to the Offeror and the Purchaser, in both cases on the date of the Exercise Notice at the latest;

(iii) the Information and Consultation Process shall have been fully completed and evidence thereof shall have been provided to the Offeror and the Purchaser, in both cases on the date of the Exercise Notice at the latest;

(iv) the provisions of paragraphs (a) and (b) of Clause 5 of this Letter shall have been definitively complied with and evidence thereof shall have been provided to the Offeror and the Purchaser, in both cases on the date of the Exercise Notice at the latest;

(v) no Material Adverse Change shall have occurred prior to or on the Signing Date; and

(vi) no Permitted Transfer shall have been completed in breach of Clause 10 prior to or on the Signing Date.

(b) In the event that any and all Conditions Precedent to Signing are not fulfilled or validly waived on the Signing Date at the latest, the Offeror may elect, without incurring any liability whatsoever in such respect, notwithstanding any provisions to the contrary in this Letter, which the parties to this Letter expressly acknowledge and agree, to terminate this Letter (subject to Clauses 3(c)(if applicable), 13(f), 17 through 19 and 22, which shall survive such termination) upon written notice served to the Sellers' Representative, in which case the Securities Purchase Agreement shall not be executed.

13. EXERCISE OF THE PUT OPTION - EXECUTION OF THE SECURITIES PURCHASE AGREEMENT

(a) If the Sellers decide to exercise the Put Option, the Sellers' Representative shall do so on behalf of all the Sellers by notifying the Offeror and the Purchaser in writing of the Sellers' decision between the Exercise Period Opening Date (included) and the Expiry Date (included) (the "Exercise Notice"), in the form attached to this Letter as Schedule 2.

(b) The Exercise Notice shall specify the date (being a Business Day no sooner than the fifth (5th) Business Day and no later than the tenth (10th) Business Day after the date on which the notice was sent) on which the Securities Purchase Agreement is to be executed, unless the Offeror and the Sellers' Representative agree in writing on another date prior to or on such date (either of such dates, the "Signing Date"), and the time and location in Paris at which the Securities Purchase Agreement is to be executed, unless otherwise agreed in writing by the Sellers' Representative and the Offeror prior to or on the Signing Date.

(c) In any case, subject to the sending of the Exercise Notice between the Exercise Period Opening Date (included) and the Expiry Date (included) and subject to the terms of this Letter (and, in particular, subject to the terms of Clauses 3(b), 9(b) and 12), we irrevocably undertake to procure that the Purchaser executes, and the Purchaser hereby irrevocably undertakes to execute the Securities Purchase Agreement, and we irrevocably undertake to execute the Securities Purchase Agreement for the sole purpose of Section 11.4 of the Securities Purchase Agreement, on the Signing Date, at the time and location specified in the Exercise Notice, or at such other time and/or location as may be agreed upon in writing by the Sellers' Representative and the Offeror prior to or on the Signing Date.

(d) We acknowledge that as of the date hereof, the Sellers accept the benefit of the Put Option without undertaking to exercise it. Until the Sellers' Representative's exercise of the Put Option on behalf of all the Sellers, the Sellers will therefore not be committed to sell the Transferred Securities to the Purchaser and will not be bound by any obligation in connection with the Transaction.

(e) In connection with the significant amount of fees and expenses incurred by the Offeror on behalf of the Purchaser and/or by the Purchaser since the beginning of our discussions for the purposes of evaluating the Transaction and preparing this Letter (together with its Schedules), the Sellers hereby undertake, individually and not jointly (*conjointement mais non solidairement*), to reimburse to the Purchaser (or to the Offeror or to such other Affiliate of the Offeror and within such proportions as the Purchaser and the Offeror may jointly notify to the Sellers' Representative for such purpose), within thirty (30) calendar days of, where applicable, the Expiry Date or the Signing Date, those fees and expenses, in a maximum aggregate amount of five millions Euros (€5,000,000) and provided that the relevant supporting documents are provided to the Sellers' Representative, each of them within the limit of its Portion (as such term is defined below) of such fees and expenses, (A) should the Sellers' Representative (on behalf of all the Sellers): (i) refuse any proposition by the Offeror to postpone the date mentioned in Clause 1(a)(ii) pursuant to Clause 1(b) by at least one (1) month, where the Exercise Period Opening Date may not occur before March 31, 2016 for a reason beyond the Offeror's control; or (ii) decide, as is the Sellers' right, not to exercise the Put Option on behalf of all the Sellers between the Exercise Period Opening Date (included) and the Expiry Date (included), provided that the Offeror has complied with all of its material obligations hereunder, or (B) should any Seller or Kepler M2 not proceed with the execution of the Securities Purchase Agreement on the Signing Date, in the event that the Put Option is exercised by the Sellers' Representative on behalf of all the Sellers between the Exercise Period Opening Date (included) and the Expiry Date (included). For the avoidance of doubt, it is expressly specified that in the event that the Put Option and this Letter terminate at the date mentioned in Clause 1(a)(ii) (as postponed pursuant to (A)(i) above, as the case may be) in accordance with Clause 1(b) above prior to the occurrence of the Exercise Period Opening Date for any reason beyond the Sellers' control, the Sellers shall not be liable for any reimbursement of fees and expenses whatsoever.

For the purpose of the preceding paragraph, "Portion", when used with respect to a Seller, shall mean the fraction having for numerator, the portion of the Adjusted Enterprise Value (as such term is defined below) which would have been allocable to the Transferred Securities (other than the Mezzanine Bonds, if any) owned by such Seller by application of the provisions of Section 2.9 of the Securities Purchase Agreement (i) as if the Final Price was equal to the Enterprise Value (without any net cash or working capital adjustment), (ii) as of, where applicable, the Expiry Date or the Signing Date and (iii) by using the foreign exchange rate of Euros converted into US Dollars as of, where applicable, the Expiry Date or the Signing Date, as determined on the basis of the Euro foreign exchange reference rate of the European Central Bank as updated by 3 p.m. C.E.T. on, where applicable, the Expiry Date or the Signing Date, and for denominator, the Adjusted Enterprise Value.

For the purpose of the preceding paragraph, "Adjusted Enterprise Value" shall mean the Enterprise Value less the value as of, where applicable, the Expiry Date or the Signing Date, of the Mezzanine Debt, as converted from Euros into US Dollars by using the foreign exchange rate of Euros converted into US Dollars as of, where applicable, the Expiry Date or the Signing Date, as determined on the basis of the Euro foreign exchange reference rate of the European Central Bank as updated by 3 p.m. C.E.T. on, where applicable, the Expiry Date or the Signing Date.

The parties to this Letter expressly acknowledge and agree that notwithstanding anything to the contrary in this Letter, the provisions of this Clause 13(e) shall survive any termination of

this Letter, (A) should the Sellers' Representative (on behalf of all the Sellers): (i) refuse any proposition by the Offeror to postpone the date mentioned in Clause 1(a)(ii) pursuant to Clause 1(b) by at least one (1) month, where the Exercise Period Opening Date may not occur before March 31, 2016 for a reason beyond the Offeror's control; or (ii) decide, as is the Sellers' right, not to exercise the Put Option on behalf of all the Sellers between the Exercise Period Opening Date (included) and the Expiry Date (included), provided that the Offeror has complied with all of its material obligations hereunder, or (B) should any Seller or Kepler M2 not proceed with the execution of the Securities Purchase Agreement on the Signing Date, in the event that the Put Option is exercised by the Sellers' Representative on behalf of all the Sellers between the Exercise Period Opening Date (included) and the Expiry Date (included).

(f) Subject to the provisions of Clause 13(e) above, each party to this Letter shall be responsible for payment of all fees and costs incurred by it or on its behalf in connection with the negotiation, preparation and signing of this Letter (and its Schedules) and the consummation of the transactions contemplated hereby, including the fees and disbursements of its financial advisors, accountants and attorneys.

(g) In any case, each party to this Letter agrees to be bound by the specific commitments expressly made by it under this Letter, as the case may be.

(h) Subject to the sending by the Sellers' Representative of the Exercise Notice between the Exercise Period Opening Date (included) and the Expiry Date (included) and subject to the terms of this Letter (and, in particular, subject to the terms of Clauses 3(b), 9(b) and 12), Kepler M2 hereby irrevocably undertakes to execute, and the Sellers undertake to procure that Kepler M2 executes, the Securities Purchase Agreement for the sole purpose of Sections 5.1 to 5.5, 5.9 and 5.12 of the Securities Purchase Agreement on the Signing Date, at the time and location specified in the Exercise Notice, or at such other time and/or location as may be agreed upon in writing by the Sellers' Representative and the Offeror prior to or on the Signing Date.

14. MANAGEMENT SINCE THE DATE HEREOF

(a) As from the date hereof (included) and until (and including) the actual date of execution of the Securities Purchase Agreement (or, failing the delivery of an Exercise Notice, the Expiry Date, or, in case of termination of this Letter in accordance with the provisions of Clauses 3(b), 9(b) and 12, the date of receipt by the Sellers' Representative of the termination notice served by the Offeror), except as may be (*x*) required by applicable Laws or any Governmental Authority, or (*y*) expressly contemplated in this Letter or in the Securities Purchase Agreement, or (*z*) consented to in writing by the Offeror and the Purchaser (which consent shall not be unreasonably withheld or delayed, having due consideration for the interests of the Group Companies and ManCo), the Sellers and ManCo, within the limits of their respective authority as shareholder, officer, director or employee of the Target Companies, undertake to:

(i) procure that the Target Companies will carry on their activities only in the ordinary course of business, with due care and attention as *bon père de famille* (*de façon prudente, diligente et soigneuse*) and in substantially the same manner as heretofore conducted, so as to preserve in all material respects their businesses and their relationships with Third Parties including their customers; and

(ii) without limiting the general scope of paragraph (i) above, prevent each of the Group Companies and ManCo from taking or committing to take any of the actions set forth in Sections 5.9(b)(i) to 5.9(b)(xxiv) of the Securities Purchase Agreement.

(b) For the purposes of granting any consents which may be requested by the Sellers' Representative, a Group Company or ManCo pursuant to this Clause 14, the Offeror and the Purchaser hereby designate Mr. Shahar Bar with immediate effect and represent and warrant to, and agree with, the Sellers' Representative, each of the Sellers and Kepler M2 that Mr. Shahar Bar shall have full capacity and right to give any such consents on behalf of the Offeror and the Purchaser during the term of this Letter. Within three (3) Business Days of receipt of any request for consent by the Sellers' Representative, a Group Company or ManCo, Mr. Shahar Bar, on behalf of the Offeror and the Purchaser, shall have the right to notify the Sellers' Representative, the relevant Group Company or ManCo that the Offeror and the Purchaser object to the proposed action (which notice of objection shall indicate their reasons for so objecting). If Mr. Shahar Bar, on behalf of the Offeror and the Purchaser, shall not have notified the Sellers' Representative, the relevant Group Company or ManCo, as the case may be, of the objection of the Offeror and the Purchaser to a proposed action within such period of three (3) Business Days, the Offeror and the Purchaser shall be deemed to have consented to such proposed action.

15. ACCESS TO THE TARGET COMPANIES

During the period from the date hereof (included) to the actual date of execution of the Securities Purchase Agreement (or, failing the delivery of an Exercise Notice, the Expiry Date, or, in case of termination of this Letter in accordance with the provisions of Clauses 3(b), 9(b) and 12, the date of receipt by the Sellers' Representative of the termination notice served by the Offeror), upon the reasonable written request of the Offeror and/or the Purchaser and subject to compliance by the Offeror and/or the Purchaser and their advisors with the terms of the Confidentiality Agreement, the Sellers' Representative (on behalf of all the Sellers) shall use its commercially reasonable endeavors to arrange for the Offeror and/or the Purchaser and their representatives and agents to be granted reasonable access during normal business hours to each Target Company's documents and senior management as the Offeror and/or the Purchaser may reasonably require in order to ensure a timely and efficient Closing of the Transaction, provided that such access shall not interfere with the normal business and operations of the Target Companies.

16. EXCLUSITIVITY

(a) In consideration for the Put Option granted under this Letter, during the period from the date hereof (included) to the actual date of execution of the Securities Purchase Agreement (or, failing the delivery of an Exercise Notice, the Expiry Date, or, in case of termination of this Letter in accordance with the provisions of Clauses 3(b), 9(b) and 12, the date of receipt by the Sellers' Representative of the termination notice served by the Offeror), the Sellers shall not, and shall procure that the Target Companies shall not, directly or indirectly:

(i) enter into a Contract for the transfer, by any means, of substantial assets of any of the Target Companies or acquisition of all or part of the equity interests in or of any of the Target Companies, the merger, spin-off, contribution, business combination, recapitalization, or similar transaction involving any of the Target Companies other than the transactions contemplated by the Securities Purchase Agreement (any of the foregoing being referred to as an "Acquisition Proposal");

(ii) solicit, initiate or encourage any inquiries or proposals that constitute or could reasonably constitute an Acquisition Proposal;

(iii) initiate or engage in negotiations with any Person (or group of Persons) other than the Offeror and the Purchaser (a "Potential Bidder") concerning any Acquisition Proposal; provided, however, to the extent that any of the foregoing have already occurred, they shall be suspended or terminated during the period from the date

hereof to the Closing (or, failing the delivery of an Exercise Notice, the Expiry Date, or, in case of termination of this Letter in accordance with the provisions of Clauses 3(b), 9(b) and 12, the date of receipt by the Sellers' Representative of the termination notice served by the Offeror); and

(iv) undertake any action which may jeopardize the Transaction.

(b) During the period from the date hereof (included) to the actual date of execution of the Securities Purchase Agreement (or, failing the delivery of an Exercise Notice, the Expiry Date, or, in case of termination of this Letter in accordance with the provisions of Clauses 3(b), 9(b) and 12, the date of receipt by the Sellers' Representative of the termination notice served by the Offeror), the Sellers shall, and shall procure that the Target Companies shall, immediately notify the Offeror and the Purchaser of any contacts received by them or any of their representatives or advisors or Affiliates or Connected Persons from a Potential Bidder to discuss or negotiate a possible Acquisition Proposal. Such notice shall indicate in reasonable detail the identity of the Potential Bidder and the content of the discussion or Acquisition Proposal, if one was made.

(c) Notwithstanding the provisions of paragraphs (a) and (b) above, the Holding shall be entitled to inform its employees of the possibility to present an acquisition offer in accordance with Clause 5 and provide them with any reasonable information they may request in such context.

(d) The Sellers may terminate this exclusivity undertaking with immediate effect upon written notice served by the Sellers' Representative to the Offeror in the event that the Purchaser fails to execute the Securities Purchase Agreement and/or the Offeror fails to execute the Securities Purchase Agreement for the sole purpose of Section 11.4 of the Securities Purchase Agreement, on the Signing Date, provided that all the Conditions Precedent to Signing are satisfied or validly waived on the Signing Date at the latest and this Letter has not been previously terminated pursuant to Clauses 3(b) and 9(b) above.

17. CONFIDENTIALITY

(a) The existence and terms of this Letter as well as the status of the Transaction process, the terms and conditions, or any other fact or information with respect to the Transaction shall be kept strictly confidential and shall not be disclosed by the parties to this Letter to any third party other than the Affiliates and Connected Persons of the parties to this Letter, except as may be required (i) by applicable Laws or any Governmental Authority or (ii) for the due performance of any obligation under this Letter (including for the purposes of Clauses 3 and 10).

(b) Sections 11.2.1 and 11.2.2(a) of the Securities Purchase Agreement shall apply *mutatis mutandis* to this Letter and from the date hereof.

18. SELLERS' REPRESENTATIVE

(a) Mr. Delahousse is hereby unconditionally, irrevocably and exclusively appointed as the representative of the Sellers for the purposes of any consent, notice, action or step to be given, conducted or taken hereunder for which this Letter expressly provides that such consent, notice, action or step is to be given, conducted or taken by the Sellers' Representative. In all cases where this Letter so refers to a consent, notice, action or step to be given, conducted or taken by the Sellers' Representative, Mr. Delahousse shall be the sole Person entitled to act in the name and for the account ("*au nom et pour le compte*") of all Sellers, in the capacity of the Sellers' joint representative ("*mandataire commun*") in accordance with article 1984 *et seq*. of the French Civil Code. The Sellers shall be bound by any decision and act of the Sellers' Representative made in accordance with this Letter. The Sellers' Representative shall

be appointed for the term of this Letter and shall not be revoked by the Sellers during such term. Mr. Delahousse hereby accepts and undertakes to act as Sellers' Representative for the term of this Letter. The Offeror and the Purchaser shall not be bound or deemed to be bound by any separate agreement or arrangement between the Sellers to which the Offeror and the Purchaser are not a party.

(b) Notwithstanding anything to the contrary in this Letter, should Mr. Delahousse, hereby appointed, be unable to perform his duties in acting as the Sellers' Representative, for any reason whatsoever, Mr. Congard will replace him as Sellers' Representative. In such case, Mr. Congard must notify to each Seller, to the Offeror and to the Purchaser that he is henceforth acting as the Sellers' Representative.

(c) Should Mr. Congard be unable to perform his duties to act as the Sellers' Representative, for any reason whatsoever, the Sellers' Representative will be appointed among the Sellers by the Sellers. If the Sellers do not reach an agreement within ten (10) days of the date Mr. Congard has ceased to perform his duties as Sellers' Representative, then the Sellers' Representative shall be appointed among the Sellers by the President of the Commercial Court of Paris ruling in summary form (*statuant en référé*), such ruling being unchallengeable in appeal.

19. NOTICES

Section 11.8 of the Securities Purchase Agreement shall apply *mutatis mutandis* to this Letter, all notices and other communications under this Letter to be made to the relevant party to this Letter at its address, E-mail address or fax number set forth below:

If to the Offeror, to: **Harmonic Inc.**

4300 North First Street
San Jose, CA 95134, United States of America
Attn: Timothy Chu, *General Counsel*
E-mail: tim.chu@harmonicinc.com and
harmoniclegal@harmonicinc.com

With a copy to: **Shearman & Sterling LLP**

114, avenue des Champs-Elysées
75008 Paris, France
Attn: Nicolas Bombrun
E-mail: Nicolas.Bombrun@Shearman.com
Phone: +33.1.53.89.48.48
Fax: +33.1.42.99.78.00

If to the Purchaser, to: **Harmonic Europe SAS**

50, rue Camille Desmoulins
92130 Issy-les-Moulineaux, France
Attn: Raphael Segur
E-mail: Raphael.Segur@harmonicinc.com and
harmoniclegal@harmonicinc.com

<u>With a copy to</u>: **Shearman & Sterling LLP**

114, avenue des Champs-Elysées
75008 Paris, France
Attn: Nicolas Bombrun
E-mail: Nicolas.Bombrun@Shearman.com
Phone: +33.1.53.89.48.48
Fax: +33.1.42.99.78.00

<u>If to a Seller,</u> to: The Sellers' Representative

Mr. Delahousse

15, rue Trévois
92300 Levallois-Perret, France
Attn: Christophe Delahousse
E-mail: christophe.delahousse@thomson-networks.com
Fax: +33.01.34.25.96.80

<u>With a copy to</u>: **Orrick Rambaud Martel**

31 avenue Pierre 1er de Serbie
75782 Paris cedex 16, France
Attn: Saam Golshani
E-mail: sgolshani@orrick.com
Phone: +33 1 53 53 75 00
Fax: + 33 1 53 53 75 01

or to such other Persons or at such other addresses or fax numbers as hereafter may be furnished by any party to this Letter by like notice to the others.

20. REPRESENTATION AND WARRANTIES OF THE OFFEROR

The Offeror hereby makes the following representations and warranties to the Sellers, each of which is true and correct as of the date of this Letter:

(a) The Offeror is a corporation duly organized and validly existing under the laws of the State of Delaware, is not in a state of insolvency (*en état de cessation des paiements*), nor subject to any Bankruptcy Proceedings and no facts exist that would result in any such event occurring. The Offeror has the corporate power and authority to enter into this Letter, to perform its obligations hereunder and to consummate the transactions contemplated hereby.

(b) The execution of this Letter and the consummation of the transactions contemplated hereby have been duly authorized by the competent corporate bodies of the Offeror, and no other corporate action on the part of the Offeror is necessary to authorize the execution of this Letter or the consummation of any of the transactions contemplated hereby.

(c) This Letter has been duly executed by the Offeror and constitutes, and shall constitute, legal, valid and binding obligations of the Offeror, enforceable against it in accordance with its terms.

(d) Neither the entering into of this Letter nor the performance by the Offeror of its obligations hereunder, nor the consummation of the transactions contemplated herein does or will:

(i) conflict with or violate any provision of the Organizational Documents of the Offeror;

(ii) violate, conflict with or result in the breach or termination of, or constitute a default or event of default (or an event which with notice, lapse of time, or both, would constitute a default or event of default), under the terms of, any Contracts or Governmental Authorizations to which the Offeror or any of its Affiliates is a party or by which the Offeror or any of its Affiliates is bound; or

(iii) subject to the obtaining of the FMEF Clearance, constitute a violation by the Offeror or any of its Affiliates of any applicable Laws or Judgments, except for any such matters that would not, either individually or in the aggregate, have a material adverse effect on the ability of the Offeror to perform its obligations under this Letter.

(e) Other than the FMEF Clearance, no Governmental Authorization or other third party consent is required to be made or obtained by the Offeror or any of its Affiliates prior to the Closing in connection with: (a) the entering into of this Letter by the Offeror, (b) the performance by the Offeror of its obligations hereunder, or (c) the consummation of any of the transactions contemplated by this Letter.

21. REPRESENTATION AND WARRANTIES OF THE SELLERS

Each Seller hereby makes the following representations and warranties to the Offeror, each of which is true and correct as of the date of this Letter:

(a) Each Seller which is not an individual is duly organized, validly existing and in good standing under the Laws of its jurisdiction of incorporation or formation and has all requisite corporate power and authority to own its assets and conduct its business as it has been and is now being conducted.

(b) Each Seller which is not an individual is not or has not been in a state of insolvency (*en état de cessation des paiements*), nor subject to any Bankruptcy Proceedings and no facts exist that would result in any such event occurring.

(c) Each Seller has the legal capacity or corporate power and authority and all rights to enter into this Letter, to perform its obligations hereunder and to consummate the transactions contemplated hereby.

(d) The execution of this Letter and the consummation of the transactions contemplated hereby have been duly authorized by the competent corporate bodies of each Seller which is not an individual, and no other corporate action on the part of each of such Seller is necessary to authorize the execution of this Letter or the consummation of any of the transactions contemplated hereby.

(e) This Letter has been duly executed by each Seller and constitutes, and shall constitute, legal, valid and binding obligations of each Seller, enforceable against it in accordance with its terms.

(f) Neither the entering into of this Agreement, nor the performance by each Seller of its obligations hereunder, nor the consummation of the transactions contemplated herein does or will:

(i) conflict with or violate any provision of the Organizational Documents of the relevant Seller (if such Seller is not an individual);

(ii) violate, conflict with or result in the breach or termination of, or constitute a default or event of default (or an event which with notice, lapse of time, or both, would constitute a default or event of default), under the terms of, any Contracts or

Governmental Authorizations to which the relevant Seller or any of its Affiliates (other than the Target Companies) is a party or by which such Seller or any of its Affiliates (other than the Target Companies) is bound; or

(iii) subject to the obtaining of the FMEF Clearance, constitute a violation by the relevant Seller or any of its Affiliates (other than the Target Companies) of any applicable Laws or Judgments, except for any such matters that would not, either individually or in the aggregate, have a material adverse effect on the ability of such Seller to perform its obligations under this Letter.

(g) Other than the FMEF Clearance, no Governmental Authorization or other third party consent is required to be made or obtained by each Seller or any of its Affiliates (other than the Target Companies) prior to the Closing in connection with: (a) the entering into of this Letter by the relevant Seller, (b) the performance by the relevant Seller of its obligations hereunder, or (c) the consummation of any of the transactions contemplated by this Letter.

22. GOVERNING LAW

(a) This Letter and any contractual or non-contractual obligation arising out of or in connection with this Letter shall be governed by, and construed in accordance with, French law.

(b) All disputes arising out of or in connection with this Letter (including without limitation with respect to the existence, validity, performance, termination and interpretation of this Letter and any non-contractual obligation arising out of or in connection with this Letter) shall be submitted to the exclusive jurisdiction of the Commercial Court of Paris.

Yours faithfully.

Signed on December 7, 2015 by:

____
Harmonic Inc.
By: Mr. Patrick Harshman
Position: CEO

Signed on December 7, 2015 by:

____

Harmonic Europe SAS
Represented by Harmonic International AG
By: Mr. Raphael Segur
Position: Member and President of the Board of Directors

Countersigned on December 7, 2015 by:

KEPLER M2:

____

KEPLER M2
Being a party to this Letter for the sole purpose of Clauses 13(h) and 14
By: Mr. Christophe Delahousse
Position: President

And each of the Sellers:

Mr. Eric Louvet
Represented by Mr. Christophe Delahousse

Mr. Eric Gallier
Represented by Mr. Christophe Delahousse

Mr. Jean-Marc Guiot
Represented by Mr. Christophe Delahousse

Mr. Claude Perron
Represented by Mr. Christophe Delahousse

Mrs. Crystele Trévisan-Jallu
Represented by Mr. Christophe Delahousse

Mrs. Delphine Sauvion
Represented by Mr. Christophe Delahousse

Mr. Marc Procureur
Represented by Mr. Christophe Delahousse

Mr. Christophe Delahousse

Mr. Hervé Congard
Represented by Mr. Christophe Delahousse

Countersigned on December 7, 2015 by:

And each of the Sellers (continuation):

FPCI Winch Capital 3
Represented by Edmond de Rothschild Investment Partners
Itself represented by: Mr. Sylvain Charignon
Title: Gérant

Montalivet Networks
Represented by Edmond de Rothschild Investment Partners
Itself represented by: Mr. Sylvain Charignon
Title: Gérant

FPCI CIC Mezzanine 3
Represented by CM-CIC Private Debt
Itself represented by: Mr. Sylvain Charignon

Mr. Arnaud de Puyfontaine
Represented by Mr. Sylvain Charignon

Schedule 0

Sellers

1) **Mr. Eric Louvet**, a French citizen, born on March 31, 1972 at Caen (14000), residing at 252, rue Saint-Malo, 35700 Rennes (France), referred to herein as "**Mr. Louvet**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

2) **Mr. Eric Gallier**, a French citizen, born on July 10, 1963 at Rennes (35000), residing at 11, rue des Conrois, 35200 Rennes (France), referred to herein as "**Mr. Gallier**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

3) **Mr. Jean-Marc Guiot**, a French citizen, born on April 2, 1964 at L'Haÿ-les-Roses (94240), residing at 21, rue Jules Renard, 35760 Saint Grégoire (France), referred to herein as "**Mr. Guiot**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

4) **Mr. Claude Perron**, a French citizen, born on July 16, 1958 at Loudeac (22600), residing at 11, allée de la Ferme, 35830 Betton (France), referred to herein as "**Mr. Perron**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

5) **Mrs. Crystèle Trévisan-Jallu**, a French citizen, born on December 9, 1974 at Saint-Malo (35), residing at 2, rue de la Bobinais, 35170 Bruz (France), referred to herein as "**Mrs. Trévisan-Jallu**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

6) **Mr. Marc Procureur**, a French citizen, born on March 10, 1970 at Paris (75011), residing at 30, rue Michelet, 35700 Rennes (France), referred to herein as "**Mr. Procureur**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

7) **Mrs. Delphine Sauvion**, a French citizen, born on April 21, 1977 at Toulouse (31), residing at 52, rue de la Coussaye, 95880 Enghien-les-Bains (France), referred to herein as "**Mrs. Sauvion**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

8) **Mr. Christophe Delahousse**, a French citizen, born on September 8, 1965 at Calais (62100), residing at 15, rue Trévois, 92300 Levallois-Perret (France), referred to herein as "**Mr. Delahousse**";

9) **Mr. Hervé Congard**, a French citizen, born on March 29, 1964 at Lannion (56000), residing at 16, rue Blaise Pascal, 56100 Lorient (France), referred to herein as "**Mr. Congard**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

10) **Winch Capital 3**, a *fonds professionnel de capital investissement* (FPCI) governed by the French *Code monétaire et financier* (referred to herein as "**FPCI Winch Capital 3**"), represented by its management company (*société de gestion*), Edmond de Rothschild Investment Partners, a company (*société en commandite par actions*) organized under the laws of France, having a share capital of €501,500 and its registered office at 47, rue du Faubourg Saint-Honoré, 75008 Paris (France), registered with the French Registry of Commerce and Companies under number 444 071 989 RCS Paris ("**EDRIP**"), itself represented by Mr. Sylvain Charignon, duly authorized for the purpose hereof;

11) **Montalivet Networks**, a company (*société par actions simplifiée*) organized under the laws of France, having a share capital of €100 and its registered office at 10, rue du Colisée, 75008 Paris (France), registered with the French Registry of Commerce and Companies under number 805 017 845 RCS Paris (referred to herein as "**Montalivet Networks**"), represented by EDRIP, itself represented by Mr. Sylvain Charignon, duly authorized for the purpose hereof;

12) **Mr. Arnaud de Puyfontaine**, a French citizen born on April 26, 1964 at Paris (75008) and residing at 37, rue du Général Foy, 75008 Paris (France), referred to herein as "**Mr. de Puyfontaine**", represented by Mr. Sylvain Charignon, duly authorized for the purpose hereof; and

13) **FPCI CIC Mezzanine 3**, a *fonds professionnel de capital investissement* (FPCI) governed by the French *Code monétaire et financier* (referred to herein as "**FPCI CIC Mezzanine 3**"), represented by its management company (*société de gestion*), CM-CIC Private Debt, a company (*société par actions simplifiée*) organized under the laws of France, having a share capital of €625,000 and its registered office at 4, rue Gaillon, 75002 Paris (France), registered with the French Registry of Commerce and Companies under number 503 110 595 RCS Paris, itself represented by Mr. Sylvain Charignon, duly authorized for the purpose hereof.

Schedule 1

Securities Purchase Agreement

Schedule 2

Exercise Notice

[***Letterhead of the Sellers' Representative***]

<u>PRIVATE AND CONFIDENTIAL</u>

[•], 2016

To: Harmonic Inc.

4300 North First Street
San Jose, CA 95134, United States of America

Attn: Timothy Chu, *General Counsel*
E-mail: tim.chu@harmonicinc.com and
harmoniclegal@harmonicinc.com

And: Harmonic Europe

50, rue Camille Desmoulins
92130 Issy-les-Moulineaux, France

Attn: Raphael Segur
E-mail: Raphael.Segur@harmonicinc.com and
harmoniclegal@harmonicinc.com

Cc: Shearman & Sterling LLP

114, avenue des Champs-Elysées
75008 Paris, France

Attn: Nicolas Bombrun
E-mail: Nicolas.Bombrun@Shearman.com
Fax: +33.1.42.99.78.00

By E-mail and by registered mail (postage prepaid, return receipt requested)

<u>Re: Project Tahoe - Exercise Notice</u>

Dear Sirs,

Reference is made to the offer letter dated December 7, 2015 entered into by and between the Offeror, the Purchaser, Kepler M2 and the Sellers (the "<u>Put Option Agreement</u>"). Capitalized terms in this letter (the "<u>Exercise Notice</u>") shall, unless otherwise defined herein, have the meanings ascribed to them in the Put Option Agreement.

In accordance with the provisions of Clauses 1, 9, 11, 12, 13, 19 and 22 of the Put Option Agreement, we hereby:

(i) Notify the Offeror and the Purchaser of the Sellers' decision to exercise the Put Option;

(ii) Confirm to the Offeror and the Purchaser that:

- the IP Agreement has been duly executed by Kepler and France Brevets and a certified copy of the IP Agreement duly executed by Kepler and France Brevets has been provided to the Offeror and the Purchaser, in both cases on or prior to the date hereof;

- the Information and Consultation Process has been fully completed and evidence thereof has been provided to the Offeror and the Purchaser, in both cases on or prior to the date hereof;

- the provisions of paragraphs (a) and (b) of Clause 5 of the Put Option Agreement have been definitively complied with and evidence thereof has been provided to the Offeror and the Purchaser, in both cases on or prior to the date hereof;

- as of the date hereof, save for what has been set forth in the Securities Purchase Agreement or notified pursuant to Clause 9(a) of the Put Option Agreement as constituting or being likely to constitute a Material Adverse Change, no circumstance, event or fact has occurred since the Reference Date that constitutes or would be likely to constitute a Material Adverse Change;

- pursuant to Clause 9(a)(ii) of the Put Option Agreement, the Offeror and the Purchaser will be promptly notified of the occurrence (or non-occurrence) between the date hereof (included) and the actual date of execution of the Securities Purchase Agreement (included) of any event, the occurrence (or non-occurrence) of which constitutes or would be likely to constitute a Material Adverse Change;

- as of the date hereof, no Permitted Transfer has been completed in breach of Clause 10 prior to or on the Signing Date;

- pursuant to Clause 10, no Permitted Transfer will be completed from the date hereof (included); and

- pursuant to Clause 11, should the Offeror notify to the Sellers' Representative a New Schedule 4.3(a)(iv) within two (2) Business Days of the receipt of this Exercise Notice, such New Schedule 4.3(a)(iv) will, with effect from (and including) the date of such notice, automatically supersede Schedule 4.3(a)(iv) to the Securities Purchase Agreement as appended as of the date of the Put Option Agreement, so that any reference to Schedule 4.3(a)(iv) to the Securities Purchase Agreement will be construed as a reference to the New Schedule 4.3(a)(iv). With effect from (and including) the date of such notice, Schedule 4.3(a)(iv) to the Securities Purchase Agreement as appended as of the date of the Put Option Agreement will be modified, restated and replaced in its entirety by New Schedule 4.3(a)(iv) and therefore we confirm that the New Schedule 4.3(a)(iv) will be appended to the execution version of the Securities Purchase Agreement on the Signing Date.

(iii) Specify that the Securities Purchase Agreement is to be executed on [•], 2016, unless the Sellers' Representative and the Offeror agree in writing on another date prior to or on such date, and at [•] [a.m./p.m.] (Paris time), at the offices of Shearman & Sterling LLP, 114, avenue des Champs-Elysées, 75008 Paris (France), unless otherwise agreed between the Sellers' Representative and the Offeror in writing prior to or on the Signing Date.

Pursuant to Clause 22 of the Put Option Agreement, this Exercise Notice and any contractual or non-contractual obligation arising out of or in connection with this Exercise Notice shall be governed by, and construed in accordance with, French law. All disputes arising out of or in connection with this

Exercise Notice (including without limitation with respect to the existence, validity, performance, termination and interpretation of this Exercise Notice and any non-contractual obligation arising out of or in connection with this Exercise Notice) shall be submitted to the exclusive jurisdiction of the Commercial Court of Paris.

Sincerely yours,

By: ________________________
Name: Mr. Christophe Delahousse
Title: Sellers' Representative

EXHIBIT 10.26

SALE AND PURCHASE AGREEMENT

VOLUME I / II

HARMONIC INTERNATIONAL AG

AND

HARMONIC INC.

AND

FPCI WINCH CAPITAL 3

ARNAUD DE PUYFONTAINE

CHRISTOPHE DELAHOUSSE

LAURE DELAHOUSSE

CAMILLE DELAHOUSSE

EDOUARD DELAHOUSSE

CONSTANCE DELAHOUSSE

HERVÉ CONGARD

LOUIS CONGARD

ANNE CONGARD

ERIC LOUVET

ERIC GALLIER

JEAN-MARC GUIOT

CLAUDE PERRON

CRYSTELE TRÉVISAN-JALLU

MARC PROCUREUR

DELPHINE SAUVION

MONTALIVET NETWORKS SAS

FPCI CIC MEZZANINE 3

AND

KEPLER M2

DATED FEBRUARY 11, 2016

CONTENTS

1. DEFINITIONS – INTERPRETATION 5
   - 1.1 Definitions 5
   - 1.2 Principles of Interpretation 5
2. SALE AND PURCHASE OF THE TRANSFERRED SECURITIES 6
   - 2.1 Sale and Purchase of the Transferred Securities 6
   - 2.2 Final Price 6
   - 2.3 Estimated Initial Price 7
   - 2.4 Payment of the Estimated Initial Price at Closing 7
   - 2.5 Post-Closing Determination of the Adjusted Initial Price 8
   - 2.6 Post-Closing Payment of the Initial Price Adjustment 11
   - 2.7 Post-Closing Determination of the Additional Price 12
   - 2.8 Post-Closing Payment of the Additional Price 13
   - 2.9 Allocation among the Sellers of the Final Price and of the Estimated Initial Price, the Initial Price Adjustment, the Revenues Adjustment and the Backlog Adjustment 14
3. CONDITIONS PRECEDENT 15
   - 3.1 Conditions Precedent 15
   - 3.2 Responsibility for Satisfaction 16
   - 3.3 Satisfaction or Non Satisfaction 18
   - 3.4 Transfer of Ownership 21
4. CLOSING 21
   - 4.1 Date and Place of Closing 21
   - 4.2 Closing Payments 21
   - 4.3 Closing Deliveries 21
   - 4.4 Matters at Closing 25
5. PRE-CLOSING MATTERS 25
   - 5.1 No Transfer of the Ordinary Shares, the ORAs, the OCRs, the OBSAs and the ManCo Shares, nor of the Transferred Securities 25
   - 5.2 Modification of the Holding’s by-laws 25
   - 5.3 Modification of the Terms and Conditions of the ORAs 26
   - 5.4 Modification of the Terms and Conditions of the OCRs 26
   - 5.5 Repayment of the ORAs 26
   - 5.6 No Conversion of the OCRs 26

	5.7	No Exercise of the Mezzanine Warrants	26
	5.8	Pre-Closing Statement	26
	5.9	Management between the date hereof and the Closing Date	27
	5.10	Notifications	30
	5.11	Access to Target Companies	30
	5.12	Existing Shareholders’ Documents	31
	5.13	Exclusivity	31
	5.14	Prior Approval under Change of Control Provisions	32
6.	POST-CLOSING COVENANTS		32
	6.1	SEC Filing	32
	6.2	Records	32
	6.3	Non Solicitation	33
	6.4	Non Bashing	33
7.	REPRESENTATIONS OF THE PURCHASER		33
	7.1	Organization, Authority and Validity	33
	7.2	No Breach	34
	7.3	Governmental Authorizations, Consent	34
	7.4	Financing	34
	7.5	Acknowledgements	34
8.	REPRESENTATION OF THE SELLERS		35
	8.1	General Representations by each Seller Individually	35
	8.2	Additional Representations by the Sellers Individually but not Jointly *(conjointement mais non solidairement)*	37
	8.3	Additional Representations by the ManCo Shareholders Individually but not Jointly *(conjointement mais non solidairement)*	59
9.	INDEMNIFICATION		62
	9.1	Principle	62
	9.2	Calculation	63
	9.3	Exclusions - Limitations	65
	9.4	Claim Notices	67
	9.5	Claims Involving Third Parties	68
	9.6	Duty to Mitigate	69
	9.7	Disclosures	69
	9.8	Payment	70
	9.9	Collateral	71

	9.10	Exclusivity of Remedy	71
10.	TERMINATION		72
	10.1	Primary Causes	72
	10.2	Non-Occurrence of the Closing	73
	10.3	Effect of Termination	73
11.	GENERAL PROVISIONS		73
	11.1	Cooperation	73
	11.2	Confidentiality	73
	11.3	Absence of Third-Party Rights - Assignment	74
	11.4	Guarantee of the Purchaser's payment obligations	74
	11.5	Entire Agreement	75
	11.6	Waivers and Amendments	75
	11.7	Severability	76
	11.8	Notices and Communications	76
	11.9	Sellers' Representative	77
	11.10	Parties acting Severally and Jointly *(conjointement et solidairement)*	78
	11.11	Costs and Expenses	78
	11.12	Governing Law and Disputes	78
	11.13	Language	78
	11.14	Volume II	79

<u>SALE AND PURCHASE AGREEMENT</u>

This sale and purchase agreement (this "**Agreement**") is made and entered into on February 11, 2016 by and between:

<u>EACH OF</u>:

1) **Mr. Eric Louvet**, a French citizen, born on March 31, 1972 at Caen (14000), residing at 252, rue Saint-Malo, 35700 Rennes (France), hereinafter referred to as "**Mr. Louvet**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

2) **Mr. Eric Gallier**, a French citizen, born on July 10, 1963 at Rennes (35000), residing at 11, rue des Conrois, 35200 Rennes (France), hereinafter referred to as "**Mr. Gallier**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

3) **Mr. Jean-Marc Guiot**, a French citizen, born on April 2, 1964 at L'Haÿ-les-Roses (94240), residing at 21, rue Jules Renard, 35760 Saint Grégoire (France), hereinafter referred to as "**Mr. Guiot**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

4) **Mr. Claude Perron**, a French citizen, born on July 16, 1958 at Loudeac (22600), residing at 11, allée de la Ferme, 35830 Betton (France), hereinafter referred to as "**Mr. Perron**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

5) **Mrs. Crystèle Trévisan-Jallu**, a French citizen, born on December 9, 1974 at Saint-Malo (35), residing at 2, rue de la Bobinais, 35170 Bruz (France), hereinafter referred to as "**Mrs. Trévisan-Jallu**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

6) **Mr. Marc Procureur**, a French citizen, born on March 10, 1970 at Paris (75011), residing at 30, rue Michelet, 35700 Rennes (France), hereinafter referred to as "**Mr. Procureur**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

7) **Mrs. Delphine Sauvion**, a French citizen, born on April 21, 1977 at Toulouse (31), residing at 52, rue de la Coussaye, 95880 Enghien-les-Bains (France), hereinafter referred to as "**Mrs. Sauvion**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

8) **Mr. Christophe Delahousse**, a French citizen, born on September 8, 1965 at Calais (62100), residing at 15, rue Trébois, 92300 Levallois-Perret (France), hereinafter referred to as "**Mr. Delahousse**";

9) **Mrs. Laure de Robien (married name: Delahousse),** a French citizen, born on May 23, 1966 at Amiens (80000), residing at 15, rue Trébois, 92300 Levallois-Perret (France), hereinafter referred to as "**Mrs. Laure Delahousse**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

10) **Mrs. Camille Delahousse (married name: Lefebvre),** a French citizen, born on September 17, 1991 at Amiens (80000), residing at 37 ter, rue de Villiers, 92200 Neuilly-sur-Seine (France), hereinafter referred to as "**Mrs. Camille Delahousse**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

---

11) **Mr. Edouard Delahousse,** a French citizen, born on August 26, 1993 at Amiens (80000), residing at 15, rue Trébois, 92300 Levallois-Perret (France), hereinafter referred to as "**Mr. Edouard Delahousse**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

12) **Mrs. Constance Delahousse,** a French citizen, born on July 10, 1995 at Amiens (80000), residing at 15, rue Trébois, 92300 Levallois-Perret (France), hereinafter referred to as "**Mrs. Constance Delahousse**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;
*The Party 8) acting severally and jointly (*conjointement et solidairement*) with the Parties 9) to 12) for the purposes of this Agreement;*

13) **Mr. Hervé Congard**, a French citizen, born on March 29, 1964 at Lannion (22300), residing at 16, rue Blaise Pascal, 56100 Lorient (France), hereinafter referred to as "**Mr. Congard**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

14) **Mr. Louis Congard**, a French citizen, born on July 20, 1994 at Hennebont (56700), residing at 16, rue Blaise Pascal, 56100 Lorient (France), hereinafter referred to as "**Mr. Louis Congard**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;

15) **Mrs. Anne Congard**, a French citizen, born on August 20, 1996 at Pont-l'Abbé (29120), residing at 16, rue Blaise Pascal, 56100 Lorient (France), hereinafter referred to as "**Mrs. Anne Congard**", represented by Mr. Christophe Delahousse, duly authorized for the purpose hereof;
*The Party 13) acting severally and jointly (*conjointement et solidairement*) with the Parties 14) to 15) for the purposes of this Agreement;*

16) **Winch Capital 3**, a *fonds professionnel de capital investissement* (FPCI) governed by the French *Code monétaire et financier*, represented by its management company (*société de gestion*), Edmond de Rothschild Investment Partners, a company (*société en commandite par actions*) organized under the laws of France, having a share capital of €501,500 and its registered office at 47, rue du Faubourg Saint-Honoré, 75008 Paris (France), registered with the French Registry of Commerce and Companies under number 444 071 989 RCS Paris ("**EDRIP**"), represented by Mr. Sylvain Charignon, duly authorized for the purpose hereof (hereinafter referred to as "**FPCI Winch Capital 3**");

17) **Montalivet Networks**, a company (*société par actions simplifiée*) organized under the laws of France, having a share capital of €100 and its registered office at 10, rue du Colisée, 75008 Paris (France), registered with the French Registry of Commerce and Companies under number 805 017 845 RCS Paris, represented by EDRIP, itself represented by Mr. Sylvain Charignon, duly authorized for the purpose hereof (hereinafter referred to as "**Montalivet Networks**");
*FPCI Winch Capital 3 acting severally and jointly (*conjointement et solidairement*) with Montalivet Networks for the purposes of this Agreement;*

18) **Mr. Arnaud de Puyfontaine**, a French citizen born on April 26, 1964 at Paris (75008) and residing at 37, rue du Général Foy, 75008 Paris (France), hereinafter referred to as "**Mr. de Puyfontaine**", represented by Mr. Sylvain Charignon or Mr. Laurent Tourtois or Mr. Thomas Duteil, each of them being duly authorized for the purpose hereof;

19) **FPCI CIC Mezzanine 3**, a *fonds professionnel de capital investissement* (FPCI) governed by the French *Code monétaire et financier*, represented by its management company (*société de gestion*),

CM-CIC Private Debt, a company (*société par actions simplifiée*) organized under the laws of France, having a share capital of €625,000 and its registered office at 4, rue Gaillon, 75002 Paris (France), registered with the French Registry of Commerce and Companies under number 503 110 595 RCS Paris ("**CM-CIC Private Debt**"), represented by Mr. Sylvain Charignon or Mr. Laurent Tourtois or Mr. Thomas Duteil, each of them being duly authorized for the purpose hereof (hereinafter referred to as "**FPCI CIC Mezzanine 3**");

The Parties 1) to 19) are hereinafter collectively referred to as the "**Sellers**" and individually as a "**Seller**".

OF THE FIRST PART,

AND:

20) **Harmonic International AG**, a company (*limited company*) organized under the laws of Switzerland, having a share capital of CHF 100,200 and its registered office at Avenue de la Gare 12, 1700 Fribourg (Switzerland), and registered with the Register of Commerce of Fribourg under the Company Identification Number (UID) CHE-114.530.405, represented by Mr. Raphael Segur, duly authorized for the purpose hereof (hereinafter referred to as the "**Purchaser**"),

OF THE SECOND PART,

The Sellers and the Purchaser are hereinafter referred to collectively as the "**Parties**" and, individually, as a "**Party**".

AND IN THE PRESENCE OF:

21) **Harmonic Inc.**, a company organized under the laws of the United States of America, having its registered office at 4300 North First Street, San Jose, CA 95134, represented by Mr. Patrick Harshman, duly authorized for the purpose hereof (hereinafter referred to as the "**Mother Company**"), entering into this agreement for the sole purpose of Section 11.4; and

22) **Kepler M2,** a company (*société par actions simplifiée*) organized under the laws of France, having a share capital of €3,635,805 and its registered office at 15, rue Trébois, 92300 Levallois-Perret (France), registered with the French Registry of Commerce and Companies under number 531 550 242 RCS Nanterre, represented by Mr. Delahousse, duly authorized for the purposes hereof (hereinafter referred to as "**Kepler M2**" or "**ManCo**"), being a party to this Agreement for the sole purpose of Sections 5.1 to 5.5, 5.9 and 5.12.

RECITALS

WHEREAS:

A. Financière Kepler is a company (*société par actions simplifiée*) organized under the laws of France, having a share capital of €10,553,578 and its registered office at 9, avenue des Trois Fontaines - Immeuble Cergy Etoile, 95000 Cergy (France), and registered with the French Registry of Commerce and Companies under number 805 017 951 RCS Pontoise ("**Financiere Kepler**" or the "**Holding**").

B. On the date hereof, the Sellers (other than Mr. Louvet, Mr. Gallier, Mr. Guiot, Mr. Perron, Mrs. Trévisan-Jallu, Mr. Procureur and Mrs. Sauvion) and Kepler M2 collectively hold 100% of the Ordinary Shares, ORAs, OCRs and OBSAs (as such terms and such other capitalized terms as are used without definition in these Recitals are defined in **Schedule 1.1** (*Definitions*)), representing 100% of the share capital and voting rights of Financière Kepler on a fully diluted basis, and, individually, the number of Ordinary Shares, ORAs, OCRs and OBSAs set forth opposite their respective names in the table appearing on **Schedule B** (*Allocation of the Securities of the Holding as of the date hereof*).

C. On the date hereof, the ManCo Shareholders collectively hold 100% of the ManCo Shares, representing 100% of the share capital and voting rights of ManCo, and, individually, the number of ManCo Shares set forth opposite their respective names in the table appearing on **Schedule C** (*Allocation of the ManCo Shares as of the date hereof*).

D. On the date hereof, Financière Kepler holds 5,817,000 ordinary shares (*actions ordinaires*) of Kepler, a company (*société par actions simplifiée*) organized under the laws of France, having a share capital of €5,817,000 and its registered office located at 9, avenue des Trois Fontaines - Immeuble Cergy Etoile, 95000 Cergy (France), and registered with the French Registry of Commerce and Companies under number 531 086 411 RCS Pontoise ("**Kepler**" or the "**Company**"), representing 100% of the share capital and voting rights of the Company.

E. On the date hereof, (i) Financière Kepler and Kepler hold 568,954 ordinary shares (*actions ordinaires*) of Thomson Video Networks, a company (*société par actions simplifiée*) organized under the laws of France, having a share capital of €5,689,540 and its registered office located at 57, rue Clément Ader, 35510 Cesson-Sévigné (France), and registered with the French Registry of Commerce and Companies under number 477 555 718 RCS Rennes ("**TVN**"), representing 100% of the share capital and voting rights of TVN on a non-diluted basis, and (ii) FCPE TVN Investissement, a *fonds commun de placement d'entreprise* governed by the French *Code monétaire et financier*, registered with the French Market Authority (*Autorité des Marchés Financiers*) under number FCE20120073 and managed by Equalis Capital France SAS (517 705 679 RCS Paris), registered as management company (*société de gestion*) with the French Market Authority (*Autorité des Marchés Financiers*) under number GP-09000014, holds 100% of the TVN ORANs. On the date hereof, the 568,954 ordinary shares (*actions ordinaires*) of TVN and the TVN ORANs represent 100% of the share capital and voting rights of TVN on a fully diluted basis.

F. On the date hereof, TVN holds the companies set out in the chart appearing on **Schedule F** (*Chart of the Group Companies*), such companies, TVN, the Company and the Holding being hereinafter collectively referred to as the "**Group Companies**" and individually as a "**Group Company**".

G. As part of the proposed acquisition of the Transferred Securities, the Purchaser has had access to and has been able to review a number of documents and information of a financial, accounting, fiscal, legal and operational nature concerning ManCo and the Group Companies during (i) a due diligence investigation carried out from September 8, 2015 to December 4, 2015 and (ii) management presentations to which the Purchaser and its Affiliates were invited. All these documents and information are contained in a CD Rom delivered by the Holding to the Purchaser with a copy to the Sellers' Representative and are referred to in this Agreement as the "**Data Room**".

H. The Sellers (each as to the Transferred Securities which such Seller will own at Closing) desire to sell, and the Purchaser desires to purchase, all the Transferred Securities upon the terms and subject to the conditions hereinafter set forth (the "**Transaction**").

I. Applicable workers' representatives bodies of the Group Companies have been informed and consulted in respect of the Transaction, and have given their opinion on the Transaction.

NOW, THEREFORE, THE PARTIES HERETO HAVE AGREED AS FOLLOWS:

1. DEFINITIONS - Interpretation

1.1 Definitions

In addition to such terms as are defined elsewhere in this Agreement, wherever used in this Agreement (including the Recitals) and unless the context otherwise requires, capitalized terms shall have the meaning ascribed to them in **Schedule 1.1** (*Definitions*).

1.2 Principles of Interpretation

(a) The words "includes" and "including" shall mean including without limitation.

(b) Any reference herein to "Preamble", "Recitals", "Volume", "Section", "Subsection", "Paragraph" or "Schedule" shall be deemed a reference to the preamble, the recitals, a volume, a section, a subsection or a paragraph of, or a schedule to this Agreement unless otherwise specified.

(c) Headings to Sections or Paragraphs and Schedules are for information only and are to be ignored in construing the same unless the context otherwise requires.

(d) Definitions given for a noun also apply *mutatis mutandis* to verbs, adjectives and adverbs that have the same root and vice versa.

(e) Words denoting the singular shall include the plural and vice versa and words denoting any gender shall include all genders.

(f) This Agreement is comprised of Volume I and Volume II. The Schedules to this Agreement shall be deemed to be a part of this Agreement, and references to "this Agreement" shall be deemed to include the same. The Disclosure Schedules are arranged in sections and paragraphs corresponding to the numbered and lettered Sections and Paragraphs of this Agreement.

(g) The provisions of Articles 640 to 642 of the French Code of Civil Procedure (*Code de procédure civile*) shall be applied to calculate the period of time within which or following which any act is to be done or step taken, provided that for purposes of this Agreement, the references in Article 642 to "*un jour férié ou chômé*" and "*premier jour ouvrable*" shall be interpreted by reference to the definition of "Business Day" appearing herein.

(h) Unless the context otherwise requires, any reference to a statutory provision shall include such provision as it exists and is construed as of the date of this Agreement.

(i) Any reference to "written" or "writing" includes any methods of representing words (including, but not limited to, any E-mails, leaflets, papers, notes, any writing on an electronic or visual display screen or any other writing, whether or not in a transitory form).

(j) Unless otherwise expressly provided for herein, a reference to a specific time of day shall be to local time in Paris, France.

2. SALE AND PURCHASE OF THE TRANSFERRED SECURITIES

2.1 Sale and Purchase of the Transferred Securities

Subject to the terms and conditions of this Agreement, at the Closing, each of the Sellers (each as to the Transferred Securities which such Seller will own on the Closing Date) agrees to sell and deliver to the Purchaser, and the Purchaser agrees to purchase from each of the Sellers, all of the Transferred Securities outstanding at the Closing, free and clear of all Liens, with all rights and benefits attached or accruing to them at the Closing (including, without limitation, the right to receive all dividends or distributions declared, made or paid on or after the Closing Date).

2.2 Final Price

The final purchase price to be paid by the Purchaser to the Sellers for the sale of the Transferred Securities under this Agreement shall be the sum of the Adjusted Initial Price and the Additional Price (the result of such sum being hereinafter referred to as the "**Final Price**"), respectively defined as follows:

2.2.1 The "**Adjusted Initial Price**" shall be:

(i) US Dollars 75,000,000 (seventy five millions) (the "**Enterprise Value**");

(ii) adding the amount of Net Cash (if such amount is positive), as converted from Euros into US Dollars by using the Closing Exchange Rate, or subtracting the absolute value of the amount of Net Cash (if such amount is negative), as converted from Euros into US Dollars by using the Closing Exchange Rate;

(iii) adding the amount of the Working Capital Adjustment, as converted from Euros into US Dollars by using the Closing Exchange Rate, corresponding to (a) an increase of the amount of the Adjusted Initial Price if this amount is positive and (b) a decrease of the amount of the Adjusted Initial Price if this amount is negative;

(iv) adding the amount of ManCo Net Cash (if such amount is positive), as converted from Euros into US Dollars by using the Closing Exchange Rate, or subtracting the absolute value of the amount of ManCo Net Cash (if such amount is negative), as converted from Euros into US Dollars by using the Closing Exchange Rate; and

(v) adding the amount of the ManCo Working Capital Adjustment, as converted from Euros into US Dollars by using the Closing Exchange Rate, corresponding to (a) an increase of the amount of the Adjusted Initial Price if this amount is positive and (b) a decrease of the amount of the Adjusted Initial Price if this amount is negative.

2.2.2 The "**Additional Price**" shall be the sum of:

(i) the Revenues Adjustment, if any; and

(ii) the Backlog Adjustment, if any.

2.3<u>**Estimated Initial Price**</u>

Pending final determination of the Adjusted Initial Price on the basis of the Purchaser Completion Statement, the aggregate amount in US Dollars to be paid by the Purchaser on the Closing Date in consideration for all the Transferred Securities (the "**Estimated Initial Price**") shall be equal to:

(i) the Enterprise Value of US Dollars 75,000,000;

(ii) <u>plus</u> the Estimated Net Cash (if positive), as converted from Euros into US Dollars by using the Pre-Closing Exchange Rate, or minus the absolute value of the Estimated Net Cash (if negative), as converted from Euros into US Dollars by using the Pre-Closing Exchange Rate;

(iii) <u>plus</u> the Estimated Working Capital Adjustment, as converted from Euros into US Dollars by using the Pre-Closing Exchange Rate, corresponding to (a) an increase of the amount of the Estimated Initial Price if this amount is positive and (b) a decrease of the amount of the Estimated Initial Price if this amount is negative;

(iv) <u>plus</u> the Estimated ManCo Net Cash (if positive), as converted from Euros into US Dollars by using the Pre-Closing Exchange Rate, or minus the absolute value of the Estimated ManCo Net Cash (if negative), as converted from Euros into US Dollars by using the Pre-Closing Exchange Rate; and

(v) <u>plus</u> the Estimated ManCo Working Capital Adjustment, as converted from Euros into US Dollars by using the Pre-Closing Exchange Rate, corresponding to (a) an increase of the amount of the Estimated Initial Price if this amount is positive and (b) a decrease of the amount of the Estimated Initial Price if this amount is negative.

2.4<u>**Payment of the Estimated Initial Price at Closing**</u>

On the Closing Date, the Purchaser shall pay the Estimated Initial Price as follows:

(a) US Dollars 13,500,000, as converted from US Dollars into Euros by using the Escrow Pre-Closing Exchange Rate (the "**Amount in Escrow**"), by wire transfer of immediately available Euro funds into the Escrow Account, pursuant to the provisions of the Escrow Agreement, such Amount in Escrow being released pursuant to the Escrow Agreement and Sections 2.6, 3.3(d) and 9.9 below; and

(b) the remaining portion of the Estimated Initial Price, if any, to the Sellers by wire transfer of immediately available US Dollar funds to such accounts of the Sellers as shall have been notified to the Purchaser by the Sellers' Representative for such purpose in the Pre-Closing Statement, together with the allocation of the remaining portion of the Estimated Initial Price among the Sellers. Such allocation shall be made under the sole and exclusive responsibility of the Sellers in accordance with the provisions of Section 2.9 below and the Purchaser and the Target Companies shall incur no liability whatsoever in respect thereto, it being expressly specified that:

- each Seller (other than FPCI Winch Capital 3 and Montalivet Networks) shall in no event be granted an amount higher than an amount equal to 100% of the portion of the Estimated Initial Price allocated to the Transferred Securities it owns pursuant to the provisions of Section 2.9 below less its Allocable Fraction of US Dollars 13,500,000;

- FPCI Winch Capital 3 shall in no event be granted an amount higher than an amount equal to 100% of the portion of the Estimated Initial Price allocated to the Transferred Securities it owns pursuant to the provisions of Section 2.9 below less the sum of (i) its Allocable Fraction of US Dollars 13,500,000 and (ii) Montalivet Networks' Allocable Fraction of US Dollars 13,500,000; and

- Montalivet Networks shall in no event be granted an amount higher than an amount equal to 100% of the portion of the Estimated Initial Price allocated to the Transferred Securities it owns pursuant to the provisions of Section 2.9 below.

2.5 Post-Closing Determination of the Adjusted Initial Price

The Adjusted Initial Price shall be calculated after the Closing in accordance with the following provisions:

2.5.1 Draft Purchaser Completion Statement

Within ninety (90) days after the Closing Date, the Purchaser shall draw up the Closing Accounts and provide them to the Sellers' Representative together with a written draft statement (the "**Purchaser Completion Statement**") setting out:

(a) its determination, in accordance with the Closing Accounts Accounting Principles, of (A) the amounts of (i) the Cash, the Debt and the Net Cash, (ii) the Working Capital, the Normative Working Capital and the Working Capital Adjustment, (iii) the ManCo Cash, the ManCo Debt and the ManCo Net Cash, (iv) the ManCo Working Capital, the ManCo Normative Working Capital and the ManCo Working Capital Adjustment and of (B) the Closing Exchange Rate, together with reasonable details and supporting documentation to such calculations; and

(b) its determination of the Adjusted Initial Price calculated in accordance with Section 2.2.1 above and of the resulting Initial Price Adjustment.

2.5.2 Review of the draft Purchaser Completion Statement by the Sellers' Representative

(a) The Sellers' Representative shall be entitled to review the Closing Accounts and the draft Purchaser Completion Statement and shall, within thirty (30) Business Days after receipt of the same, notify the Purchaser in writing (an "**Objection Notice**") whether or not it accepts the draft Purchaser Completion Statement for the purposes of this Agreement. An Objection Notice shall set out in reasonable details and with supporting documentation those items of the draft Purchaser Completion Statement on which the Sellers' Representative disagrees (the "**Disputed Items**"), the reasons for such disagreement and the

adjustments (and the reasons for such adjustments) which, in the Sellers' Representative opinion, should be made to the Disputed Items in order for the draft Purchaser Completion Statement to comply with the requirements of this Agreement. Except for the Disputed Items specifically set out in the Objection Notice, the Sellers shall be deemed to have agreed the draft Purchaser Completion Statement in full. If, by the expiry of such period of thirty (30) Business Days, no Objection Notice is received by the Purchaser or the Sellers' Representative has notified in writing the Purchaser that it agrees with the draft Purchaser Completion Statement, such draft Purchaser Completion Statement will constitute the Purchaser Completion Statement for the purposes of this Agreement and shall be final and binding on the Parties.

(b) If the Sellers' Representative serves an Objection Notice in accordance with Paragraph (a) above, the Purchaser and the Sellers' Representative shall discuss in good faith the objections of the Sellers' Representative on the Disputed Items and shall use their reasonable endeavors to reach an agreement on the adjustments (if any) to be made to the Disputed Items, within ten (10) Business Days after receipt by the Purchaser of the Objection Notice. In the case of such an agreement within the above-mentioned timeframe, the draft Purchaser Completion Statement as agreed pursuant to this Paragraph will constitute the Purchaser Completion Statement for the purposes of this Agreement and shall be final and binding on the Parties.

2.5.3 Failure to agree on the Purchaser Completion Statement

If the Sellers' Representative and the Purchaser do not reach an agreement within the period referred to in Section 2.5.2(b) above, then the unresolved Disputed Items may be referred (on the application of either the Sellers' Representative or the Purchaser) for determination to such partner leading the audit or valuation practice in Paris of an internationally recognized independent audit or valuation firm as the Sellers' Representative and the Purchaser shall agree within ten (10) Business Days following the expiry of the above-mentioned period or, failing such an agreement, appointed in the capacity of a *tiers arbitre mandataire* in accordance with the provisions of article 1592 of the French Civil Code by the President of the *Tribunal de Commerce de Paris* ruling under the form of summary proceedings without recourse (*statuant en la forme des référés et sans recours possible*), each of the Purchaser and the Sellers' Representative having the opportunity to be heard (the "**Firm**").

2.5.4 Procedures applicable to the determination of the Adjusted Initial Price by the Firm

(a) Following appointment of the Firm, the Sellers' Representative and the Purchaser shall each promptly (and in any event within ten (10) Business Days after the acceptance by the Firm of its mission) prepare a written statement setting out their respective position on each unresolved Disputed Items. This statement shall include the relevant supporting documents (including the Closing Accounts, the draft Purchaser Completion Statement and the Objection Notice) and shall be submitted to the Firm, with a copy to the other Party, for final determination.

(b) The mission of the Firm shall be limited to the review and resolution of the unresolved Disputed Items based solely upon the elements presented by the Sellers' Representative and the Purchaser and shall not be carried out by independent review. In determining each unresolved Disputed Item, the Firm may not assign value to such unresolved Disputed Item greater than the greater value allowed to such unresolved Disputed Item by either the Sellers' Representative or the Purchaser or lesser than the lower value allowed to such Disputed Item by either of the Sellers' Representative or the Purchaser.

(c) The Firm shall act pursuant to the provisions of article 1592 of the French Civil Code and its decision shall be final and binding on the Parties and shall not be subject to any recourse before a court or arbitration

tribunal (absent any gross (*grossière*) or manifest (*manifeste*) mistake, fraud or fraudulent misrepresentation) except as necessary to enforce such decision.

(d) The Firm shall make its decision after due hearings of the Purchaser and the Sellers' Representative to which the latter shall be invited with a prior notice period of at least five (5) Business Days. The Firm shall deliver to the Sellers' Representative and the Purchaser a final report stating its decision within twenty (20) Business Days after acceptance by the Firm of its appointment hereunder.

(e) The decision of the Firm shall be grounded. In particular, the Firm's final report shall include the final Purchaser Completion Statement for the purposes of this Agreement which shall include the elements mentioned in Section 2.5.1 above, and specify in reasonable details what adjustments, if any, have been made to the draft Purchaser Completion Statement in respect of the unresolved Disputed Items.

(f) The Sellers and the Purchaser shall each be responsible for their own costs in connection with the preparation, review and agreement or determination of (i) the Cash, the Debt and the Net Cash, (ii) the Working Capital, the Normative Working Capital and the Working Capital Adjustment, (iii) the ManCo Cash, the ManCo Debt and the ManCo Net Cash, (iv) the ManCo Working Capital, the ManCo Normative Working Capital and the ManCo Working Capital Adjustment and (v) the Closing Exchange Rate and the Purchaser Completion Statement. The fees and expenses of the Firm shall be paid by the Party which proposed Adjusted Initial Price is farthest in US Dollars amount from the final determination thereof by the Firm.

2.5.5Principles to be applied by the Parties and the Firm

(a) The Purchaser and the Sellers' Representative agree to promptly provide each other and, where applicable, the Firm with such information and documentation in or under their respective possession or control or in the possession or control of their Affiliates (including access at all reasonable times to their personnel, books, records and files and other relevant information (including working papers of the auditors)) and such cooperation and assistance, as may be reasonably required to enable the preparation, review and agreement of the Purchaser Completion Statement. The Purchaser and the Sellers shall, following the Closing Date through the date on which the Purchaser Completion Statement is agreed or determined in accordance with the preceding Paragraphs, take all actions necessary or desirable to maintain and preserve the books, records and auditors' working papers in or under their possession or control on which the Pre-Closing Statement was based or on which the Purchaser Completion Statement is to be based so as not to impede or delay the review, objection, if any, agreement and determination of the Purchaser Completion Statement in accordance with the preceding Paragraphs.

(b) The Firm shall guarantee due process (*respect du principe du contradictoire*) to the Sellers' Representative and the Purchaser. In this respect, the Firm shall communicate to the Sellers' Representative and/or to the Purchaser, as the case may be, any information and documents that were communicated to it by the Sellers' Representative and/or the Purchaser, as the case may be, with respect to the resolution of the unresolved Disputed Items.

(c) The Sellers' Representative and the Purchaser hereby authorize each other, their respective advisers and accountants and the Firm to take copies of all information provided under Paragraph (a) above, provided that such Persons shall be bound by confidentiality undertakings consistent with the provisions of Section 11.2 below.

(d) For purposes of the review and resolution of the unresolved Disputed Items, the Firm shall be bound by and shall apply the definitions, formula and other terms set forth in this Agreement and more specifically in this Section 2.5.

2.6Post-Closing Payment of the Initial Price Adjustment

(a) If and to the extent the amount equal to the difference between the Adjusted Initial Price as resulting from the Purchaser Completion Statement and the Estimated Initial Price is positive (the "**Upward Adjustment**"), then the Purchaser shall, in accordance with provisions of Paragraph (c) below, pay the Upward Adjustment to the Sellers by wire transfer of immediately available US Dollar funds to such accounts of the Sellers as shall have been notified by the Sellers' Representative to the Purchaser for such purpose at the latest five (5) Business Days after the date on which the Purchaser Completion Statement is agreed or determined in accordance with the provisions of Section 2.5 above, together with the allocation of the Upward Adjustment among the Sellers. Such allocation shall be made under the sole and exclusive responsibility of the Sellers in accordance with the provisions of Section 2.9 below and the Purchaser and the Target Companies shall incur no liability whatsoever in respect thereto.

(b) If and to the extent the amount equal to the difference between the Adjusted Initial Price as resulting from the Purchaser Completion Statement and the Estimated Initial Price is negative (the "**Downward Adjustment**"), then:

(i) If the absolute value of the Downward Adjustment, as converted from US Dollars into Euros by using the Escrow Closing Exchange Rate, is lower than the Amount in Escrow, then the Amount in Escrow shall be partially released to the Purchaser in accordance with the provisions of the Escrow Agreement, up to an amount corresponding to the absolute value of the Downward Adjustment, as converted from US Dollars into Euros by using the Escrow Closing Exchange Rate;

(ii) If the absolute value of the Downward Adjustment, as converted from US Dollars into Euros by using the Escrow Closing Exchange Rate, is equal to the Amount in Escrow, then the Amount in Escrow shall be fully released to the Purchaser in accordance with the provisions of the Escrow Agreement;

(iii) If the absolute value of the Downward Adjustment, as converted from US Dollars into Euros by using the Escrow Closing Exchange Rate, is greater than the Amount in Escrow, then:

(A) the Amount in Escrow shall be fully released to the Purchaser in accordance with the provisions of the Escrow Agreement; and

(B) the Sellers shall, in accordance with provisions of Paragraph (c) below, pay the amount by which the absolute value of the Downward Adjustment exceeds the Amount in Escrow, as converted from Euros into US Dollars by using the Closing Exchange Rate, to the Purchaser by wire transfer of immediately available US Dollar funds to such account of the Purchaser as shall have been notified by the Purchaser to the Sellers' Representative for such purpose at the latest five (5) Business Days after the date on which the Purchaser Completion Statement is agreed or determined in accordance with the provisions of Section 2.5 above. The allocation among the Sellers of the amount to be paid to the Purchaser pursuant to this Paragraph (B), which shall be notified by the Sellers' Representative to the Purchaser at the latest five (5) Business Days after the date on which the Purchaser Completion Statement is agreed or determined in accordance with the provisions of Section 2.5 above, shall be made under the sole and exclusive responsibility

of the Sellers in accordance with the provisions of Section 2.9 below and the Purchaser and the Target Companies shall incur no liability whatsoever in respect thereto.

(c) Any and all payments pursuant to the preceding Paragraphs of this Section 2.6 shall be made within ten (10) Business Days from the date on which the Purchaser Completion Statement is agreed or determined in accordance with the provisions of Section 2.5 above, it being specified that the Sellers' Representative and the Purchaser shall serve to the escrow agent under the Escrow Agreement all necessary or appropriate notices in order to ensure the release of the Amount in Escrow in due time and proportion pursuant to this Section 2.6. Any payment required to be made pursuant to this Section 2.6 which is not made before the expiry of a thirty-day (30) period from its due date, shall carry interest at the rate of ten (10) percent per annum (on the basis of a year of 365 days) from the due date for payment until (and including) the date of actual payment.

(d) The allocation of any payment to be made by or to the Sellers pursuant to this Section 2.6 shall comply with the provisions of Section 2.9.

(e) All interests or revenue of any nature whatsoever deriving from the Amount in Escrow shall be allocated among the Purchaser and the Sellers (other than Montalivet Networks) *pro rata* the portion of the principal of the Amount in Escrow to be released to each of them pursuant to the Escrow Agreement, this Section 2.6 and Sections 3.3(d) and 9.9 below.

(f) Any payment made by the Sellers pursuant to this Section 2.6 through the release of all or part of the Amount in Escrow shall be deemed, for the amount corresponding to the portion of the Downward Adjustment allocated to Montalivet Networks in accordance with the provisions of Section 2.9, if any, which is not paid in cash by Montalivet Networks to the Purchaser pursuant to Section 2.6(b)(iii)(B) above as the case may be, to be made by FPCI Winch Capital 3 for the account of Montalivet Networks, which each Party hereto expressly acknowledges and agrees. FPCI Winch Capital 3 shall be solely and exclusively responsible for recovering such amount from Montalivet Networks and the Purchaser and the Target Companies shall incur no liability whatsoever in respect to such payment by FPCI Winch Capital 3 for the account of Montalivet Networks.

(g) For the sake of clarity, the Sellers and the Purchaser hereby agree that any Initial Price Adjustment and any payment in connection therewith shall be deemed to constitute an adjustment to the Final Price, and agree to treat any such payment as such for all Taxes, accounting and financial reporting purposes.

2.7 Post-Closing Determination of the Additional Price

2.7.1 Calculation of the Revenues Adjustment

The Revenues Adjustment (as this term is defined below) shall be calculated as promptly as practicable after the date on which the 2015 Consolidated Accounts are available and in any event within ninety (90) days after the Closing, in accordance with the following provisions:

(a) Within ninety (90) days after the Closing, the Purchaser shall deliver to the Sellers' Representative the 2015 Consolidated Accounts and prepare in good faith a draft statement (the "**Revenues Adjustment Statement**") showing (i) the combined revenues of the Group Companies for the fiscal year ended on December 31, 2015 calculated in accordance with French GAAP and on a basis consistent with the calculation as at the Reference Date set forth in **Schedule 2.7.1(a)** (*Calculation of the combined revenues of the Group Companies as at the Reference Date*), and converted from Euros into US Dollars by using the Closing Average Exchange Rate (the "**2015 Actual Revenues**"), and (ii) the difference, if any, between

such 2015 Actual Revenues and the Enterprise Value (the "**Revenues Adjustment**"), it being agreed that the amount of the Revenues Adjustment will be capped to the difference between €76,000,000 (converted from Euros into US Dollars by using the Closing Average Exchange Rate) and the Enterprise Value.

(b) The Sellers' Representative shall notify the Purchaser in writing within thirty (30) Business Days after the receipt of the draft Revenues Adjustment Statement whether or not it accepts the Revenues Adjustment stated therein. The provisions of Sections 2.5.2 to 2.5.5 shall apply *mutatis mutandis* to the determination of the Revenues Adjustment; for the purpose of the foregoing, in such Sections "Purchaser Completion Statement" shall read "Revenues Adjustment Statement" and the "Adjusted Initial Price" shall read "Revenues Adjustment".

2.7.2Calculation of the Backlog Adjustment

The Backlog Adjustment (as this term is defined below) shall be calculated within five (5) Business Days following the date of the last shipment of the Product Backlog of the Group Companies as of December 31, 2015 and in any event no later than within five (5) Business Days after June 30, 2016 in accordance with the following provisions:

(a) Within five (5) Business Days following the date of the last shipment of the Product Backlog of the Group Companies as of December 31, 2015 and in any event within five (5) Business Days after June 30, 2016, the Purchaser shall prepare in good faith and deliver to the Sellers' Representative a draft statement (the "**Backlog Adjustment Statement**") indicating (i) the Product Backlog of the Group Companies as of December 31, 2015 (the "**2015 Product Backlog**") calculated consistently with past practice and exclusively in accordance with the calculation as at the Reference Date set forth in **Schedule 2.7.2(a)** (*Calculation of the Product Backlog of the Group Companies as of December 31, 2014 and as at the Reference Date*) and, (ii) in the event such 2015 Product Backlog exceeds the Product Backlog of the Group Companies as of December 31, 2014 as set out in **Schedule 2.7.2(a)**, the portion of such excess, if any, which has actually been shipped during the first two quarters of 2016 (such portion, as converted from Euros into US Dollars by using the Closing Average Exchange Rate, being hereinafter referred to as the "**Backlog Adjustment**"), it being agreed that the Backlog Adjustment shall in any event be capped to an amount of USD 5,000,000.

(b) The Sellers' Representative shall notify the Purchaser in writing within thirty (30) Business Days after the receipt of the draft Backlog Adjustment Statement whether or not it accepts the Backlog Adjustment stated therein. The provisions of Sections 2.5.2 to 2.5.5 shall apply *mutatis mutandis* to the determination of the Backlog Adjustment; for the purpose of the foregoing, in such Sections "Purchaser Completion Statement" shall read "Backlog Adjustment Statement" and the "Adjusted Initial Price" shall read "Backlog Adjustment".

2.8Post-Closing Payment of the Additional Price

(a) The Revenues Adjustment, if any, shall be due by the Purchaser to the Sellers only if the following conditions are met, on the basis of the 2015 Consolidated Accounts:

(i) The Consolidated Net Result as at 31 December 2015 is positive; and

(ii) The Gross Margin as at 31 December 2015 is at least equal to 45%.

(b) The Backlog Adjustment, if any, shall be due by the Purchaser to the Sellers only if the Average Standard Margin, as calculated in accordance with **Schedule 1.1(F)** (*Average Standard Margin*) and on the basis of the 2015 Consolidated Accounts, for all the Product Backlog is at least of 50%.

(c) The Purchaser shall pay, by wire transfer of immediately available US Dollar funds, within ten (10) Business Days from the date on which the Revenues Adjustment is agreed or determined in accordance with the provisions of Section 2.7.1 above, the full amount of the Revenues Adjustment, if any, to such accounts of Sellers as shall have been notified by the Sellers' Representative to the Purchaser for such purpose at the latest five (5) Business Days after the date on which the Revenues Adjustment is agreed or determined in accordance with the provisions of Section 2.7.1 above, together with the allocation of the Revenues Adjustment among the Sellers. Such allocation shall be made under the sole and exclusive responsibility of the Sellers in accordance with the provisions of Section 2.9 below and the Purchaser and the Target Companies shall incur no liability whatsoever in respect thereto.

(d) The Purchaser shall pay, by wire transfer of immediately available US Dollar funds, within ten (10) Business Days from the date on which the Backlog Adjustment is agreed or determined in accordance with the provisions of Section 2.7.2 above, the full amount of the Backlog Adjustment, if any, to such accounts of the Sellers as shall have been notified by the Sellers' Representative to the Purchaser for such purpose at the latest five (5) Business Days after the date on which the Backlog Adjustment is agreed or determined in accordance with the provisions of Section 2.7.2 above, together with the allocation of the Backlog Adjustment among the Sellers. Such allocation shall be made under the sole and exclusive responsibility of the Sellers in accordance with the provisions of Section 2.9 below and the Purchaser and the Target Companies shall incur no liability whatsoever in respect thereto.

(e) Any amount due and payable by the Purchaser to the Sellers under this Section 2.8 may be offset against any and all amounts due and unpaid by the Sellers to the Purchaser under Sections 2.6, 3.3(d) and 9.8 (in the two last cases, as converted from Euros into US Dollars by using the Closing Average Exchange Rate).

(f) For the sake of clarity, the Sellers and the Purchaser hereby agree that any Additional Price and any payment in connection therewith shall be deemed to constitute an adjustment to the Final Price, and agree to treat any such payment as such for all Taxes, accounting and financial reporting purposes.

2.9 Allocation among the Sellers of the Final Price and of the Estimated Initial Price, the Initial Price Adjustment, the Revenues Adjustment and the Backlog Adjustment

(a) The Final Price shall be allocated among the Sellers based upon the number and category of Transferred Securities sold by each Seller to the Purchaser in accordance with the unit price per category of Transferred Securities, as determined pursuant to the formulas reflecting their respective terms and conditions, as modified pursuant to this Agreement as the case may be, set forth in **Schedule 2.9** (*Allocation among the Sellers of the Final Price and of the Estimated Initial Price, the Initial Price Adjustment, the Revenues Adjustment and the Backlog Adjustment*), it being specified that:

- The final value in US Dollars of 100% of the Holding Shares, OCRs and OBSAs shall be equal to:
  - Enterprise Value;

- Plus Net Cash (if positive), as converted from Euros into US Dollars by using the Closing Exchange Rate, or less the absolute value of Net Cash (if negative), as converted from Euros into US Dollars by using the Closing Exchange Rate;

- Plus Working Capital Adjustment (if positive), as converted from Euros into US Dollars by using the Closing Exchange Rate, or less the absolute value of Working Capital Adjustment (if negative), as converted from Euros into US Dollars by using the Closing Exchange Rate;

- Plus Revenues Adjustment (if any);

- Plus Backlog Adjustment (if any).

• The final value in US Dollars of 100% of the ManCo Shares shall be equal to:

  - The final value of the Ordinary Shares held by ManCo at Closing, as determined based upon what is mentioned above;

  - Plus ManCo Net Cash (if positive), as converted from Euros into US Dollars by using the Closing Exchange Rate, or less the absolute value of ManCo Net Cash (if negative), as converted from Euros into US Dollars by using the Closing Exchange Rate;

  - Plus ManCo Working Capital Adjustment (if positive), as converted from Euros into US Dollars by using the Closing Exchange Rate, or less the absolute value of ManCo Working Capital Adjustment (if negative), as converted from Euros into US Dollars by using the Closing Exchange Rate.

(b) The Estimated Initial Price, the Initial Price Adjustment, the Revenues Adjustment and the Backlog Adjustment shall be allocated among the Sellers based upon the principles set forth in Paragraph (a) above and in accordance with the provisions of **Schedule 2.9** specifically relating to such allocations.

(c) The allocation among the Sellers of the Final Price and of the Estimated Initial Price, the Initial Price Adjustment, the Revenues Adjustment and the Backlog Adjustment shall be made in accordance with the provisions of this Section under the sole and exclusive responsibility of the Sellers and the Purchaser and the Target Companies shall incur no liability whatsoever in respect thereto.

3. CONDITIONS PRECEDENT

3.1 Conditions Precedent

The respective obligations of each Party under this Agreement shall be subject to the fulfillment or waiver by mutual agreement of the Purchaser and the Sellers' Representative of the condition set forth in Paragraph (a) below.

The obligations of the Purchaser under this Agreement shall be subject to the fulfillment or waiver (in whole or in part) by the Purchaser of the conditions set forth in Paragraphs (b) to (d) below (said conditions, together with the condition set forth in Paragraph (a) below, the "**Conditions Precedent**").

(a) The FMEF Clearance shall have been obtained and shall be in full force and effect;

(b) The Required Financials shall have been delivered to the Purchaser;

(c) The IP Recovery shall have been fully completed ; and

(d) No Material Adverse Change shall have occurred.

3.2<u>Responsibility for Satisfaction</u>

3.2.1FMEF Clearance

(a) Each Party acknowledges the importance that the Condition Precedent set out in Section 3.1(a) be fulfilled as soon as possible and the Sellers confirm that they are not aware of any reason that may prevent the obtaining of the FMEF Clearance on or prior to the Long Stop Date.

(b) The Purchaser agrees to:

(i) as soon as possible after the date hereof and in any event no later than eight (8) Business Days after the date hereof and at its own expense, make relevant filings and contacts with the French Ministry for the Economy and Finance with respect to the Transaction in order to obtain the FMEF Clearance, within any terms provided by applicable Laws, and supply promptly any additional information and documentary material that may be requested by the French Ministry for the Economy and Finance;

(ii) keep the Sellers' Representative regularly informed of the processing of these filings and inform promptly the Sellers' Representative if it becomes aware of anything that could result in the FMEF Clearance being delayed or denied;

(iii) promptly provide the Sellers' Representative with the relevant (non-privileged or non-commercially sensitive) documents concerning the filings referred to above, together with any and all additional (including documentary) material that may be requested by the French Ministry for the Economy and Finance in connection with the FMEF Clearance (subject to confidential information contained therein), <u>provided</u>, in each case, that such documents and additional material relate to, or include information about, the Target Companies prior to Closing, and use its commercially reasonable endeavors to, prior to any such filings with, and communications to, the French Ministry for the Economy and Finance, (a) give to the Sellers' Representative a reasonable opportunity to discuss the content of such documents and additional material and (b) take into account its reasonable comments and suggestions;

(iv) give to the Sellers' Representative the opportunity to participate in any meeting for which its presence is required by the French Ministry for the Economy and Finance; and

(v) use its commercially reasonable endeavors in order to obtain the FMEF Clearance.

(c) The Sellers acknowledge that the above mentioned filings will require the cooperation and supply of information by the Target Companies and agree to co-operate and to cause the relevant Target Companies to co-operate with the Purchaser, upon its reasonable request, in providing promptly to the Purchaser and its advisors such assistance as may be reasonably necessary for the Purchaser to make the relevant filings

and obtain the FMEF Clearance, including but not limited to, in respect of the preparation of the information and documents and/or of the attendance to any meeting that may be required in this context.

3.2.2Required Financials

(a) The Sellers acknowledge the importance for the Purchaser that the Condition Precedent set out in Section 3.1(b) be fulfilled as soon as possible and confirm that they are not aware of any reason that may prevent the delivery of the Required Financials on or prior to the Long Stop Date.

(b) The Sellers agree to:

(i) as soon as possible after the date hereof and in any event within eight (8) Business Days from the date of this Agreement, cause the Required Financials to be prepared and audited by such internationally recognized independent accounting firm as shall have been chosen by the Purchaser for such purpose and to supply promptly, or cause to be promptly supplied, any information and documentary material that may be requested by such independent accounting firm;

(ii) keep the Purchaser regularly informed of the processing of the preparation and audit of the Required Financials and inform promptly the Purchaser if they become aware of anything that could result in the delivery of the Required Financials being delayed or compromised; and

(iii) promptly provide the Purchaser, upon its request, with any information and documentary material used in, or necessary for, the preparation and audit of the Required Financials, and with any information and documentary material that may be requested by the independent accounting firm.

(c) The Sellers agree to do all reasonable things necessary or appropriate under applicable Laws to deliver the Required Financials to the Purchaser on or prior to the Long Stop Date.

(d) The Purchaser acknowledges that the delivery of the Required Financials will require cooperation and agrees to co-operate with the Sellers, upon the reasonable request of the Sellers' Representative, in providing promptly to the Sellers such assistance as may be reasonably necessary for the Sellers to deliver the Required Financials, including but not limited to, by making a reasonable number of expert consultants available to the Sellers to contribute to the preparation and audit of the Required Financials.

3.2.3IP Recovery

(a) The Sellers acknowledge the importance for the Purchaser that the Condition Precedent set out in Section 3.1(c) be fulfilled on the Closing Date, prior to Closing, and confirm that they are not aware of any reason that may prevent the full completion of the IP Recovery on or prior to the Long Stop Date.

(b) The Sellers agree to:

(i) on the Closing Date and prior to Closing, procure that the Notice of Voluntary Termination (as defined under the IP Agreement) be delivered by Kepler to France Brevets and received by the latter, such Notice of Voluntary Termination to include any notice by Kepler of its decision (*x*) to use its right of designation of a Designated Transferee (as defined under the IP Agreement) under article 8 of the IP Agreement, provided and only in the event that the Sellers' Representative receives an IP Substitution Notice at least five (5) Business Days prior to the Closing Date, and (*y*) to designate such Entity as mentioned in the IP Substitution Notice for such purpose;

(ii) on the Closing Date and prior to Closing, procure that the Transfer Price (as defined under the IP Agreement) be paid by Kepler to France Brevets by wire transfer of immediately available funds to the bank account indicated for such purpose in the IP Agreement;

(iii) on the Closing Date and prior to Closing, deliver to the Purchaser two (2) original copies of the Assignment of Patent Rights dated as of the Closing Date to be entered into by and between France Brevets and Kepler (or such Entity as indicated in the IP Substitution Notice) duly signed by France Brevets; and

(iv) keep the Purchaser regularly informed of the processing of the IP Recovery and to inform promptly the Purchaser if they become aware of anything that could result in the full completion of the IP Recovery being delayed or compromised.

(c) The Sellers agree to do all reasonable things necessary or appropriate under applicable Laws to procure that the IP Recovery be fully completed on or prior to the Long Stop Date.

3.3Satisfaction or Non Satisfaction

(a) The Purchaser shall promptly give notice to the Sellers' Representative of the satisfaction of the Condition Precedent specified in Section 3.1(a) and in any event within two (2) Business Days of becoming aware of the same.

(b) If the Closing does not occur on the Long Stop Date at the latest because one or several Conditions Precedent specified in Section 3.1 above are not satisfied (or waived in whole or in part either by the Sellers' Representative and the Purchaser with respect to Section 3.1(a) or by the Purchaser with respect to Sections 3.1(b) to 3.1(d)), this Agreement may be terminated in accordance with Section 10.2.

(c) The Purchaser and the Sellers' Representative may in any event agree to postpone the Long Stop Date.

(d) Should the IP Recovery not be completed on the Closing Date, prior to Closing, for any reason whatsoever, and should the Purchaser decide to waive the Condition Precedent specified in Section 3.1(c) and the absence of delivery at Closing of any of the documents listed in Sections 4.3(a)(xxiv) to 4.3(a)(xxvi), and to proceed with Closing, the Sellers, notwithstanding anything to the contrary in this Agreement, hereby expressly agree and undertake to indemnify the Purchaser on a Euro for Euro basis for any and all Purchaser IP Recovery Cost and Expenses, the final amount of which will be known after Purchaser IP Recovery Full Completion, as follows:

(i) Until (but excluding) the date of delivery by the Purchaser to the Sellers' Representative of the draft Purchaser Completion Statement:

The Purchaser shall be indemnified on a Euro for Euro basis through the Adjusted Initial Price's post-Closing determination mechanism by being hereby expressly entitled to include in the amount of Debt the amount of any Purchaser IP Recovery Cost and Expenses paid or incurred after the Closing Date and until (but excluding) the date of delivery by the Purchaser to the Sellers' Representative of the draft Purchaser Completion Statement, provided that the relevant supporting documents are provided by the Purchaser to the Sellers' Representative together with the draft Purchaser Completion Statement, it being expressly agreed that the Sellers' Representative (on behalf of all the Sellers) shall not be entitled to challenge or object to the amount of the Purchaser IP Recovery Cost and Expenses added to the amount of Debt pursuant to this Paragraph (i), which the Sellers expressly acknowledge and agree, provided that such amount exactly corresponds to

the supporting documents provided to the Sellers' Representative, failing which such amount shall only be adjusted so that such amount is in line with the supporting documents provided to the Sellers' Representative; and

(ii) From (and including) the date of delivery by the Purchaser to the Sellers' Representative of the draft Purchaser Completion Statement:

If and to the extent that for any reason whatsoever, not all the Purchaser IP Recovery Cost and Expenses have been included in the amount of Debt for the purpose of the determination of the Adjusted Initial Price and of the resulting Initial Price Adjustment as mentioned in the final Purchaser Completion Statement, the Purchaser shall:

- if the Purchaser IP Recovery Full Completion takes place prior to the date of delivery by the Purchaser to the Sellers' Representative of the draft Purchaser Completion Statement, within thirty (30) calendar days of the date of delivery by the Purchaser to the Sellers' Representative of the draft Purchaser Completion Statement, and, if the Purchaser IP Recovery Full Completion takes place after the date of delivery by the Purchaser to the Sellers' Representative of the draft Purchaser Completion Statement, within thirty (30) calendar days of the Purchaser IP Recovery Full Completion,

  notify to the Sellers' Representative the amount of the difference between any and all Purchaser IP Recovery Cost and Expenses and the Purchaser IP Recovery Cost and Expenses actually included in the definition of Debt and therefore taken into account for the determination of the Adjusted Initial Price and of the resulting Initial Price Adjustment as mentioned in the final Purchaser Completion Statement (the "**Remaining Purchaser IP Recovery Cost and Expenses**"), such notice to include reasonable details and supporting documentation to the calculation of the amount of the Remaining Purchaser IP Recovery Cost and Expenses (the "**Remaining Purchaser IP Recovery Cost and Expenses Notice**").

  The Remaining Purchaser IP Recovery Cost and Expenses Notice shall be final and binding upon the Parties and shall not be challengeable by the Sellers' Representative (on behalf of all the Sellers) nor by any Seller in any way whatsoever (absent any gross (*grossière*) or manifest (*manifeste*) mistake, fraud or fraudulent misrepresentation); and

- be indemnified by the Sellers on a Euro for Euro basis for the Remaining Purchaser IP Recovery Cost and Expenses as follows:

  (A) If the amount of the Remaining Purchaser IP Recovery Cost and Expenses is lower than the amount remaining in the Escrow Account, then the Amount in Escrow shall be partially released to the Purchaser in accordance with the provisions of the Escrow Agreement, up to an amount corresponding to the Remaining Purchaser IP Recovery Cost and Expenses;

  (B) If the amount of the Remaining Purchaser IP Recovery Cost and Expenses is equal to the amount remaining in the Escrow Account, then the Amount in Escrow shall be fully released to the Purchaser in accordance with the provisions of the Escrow Agreement; and

(C) If the amount of the Remaining Purchaser IP Recovery Cost and Expenses is greater than the amount remaining in the Escrow Account, then: (x) the Amount in Escrow shall be fully released to the Purchaser in accordance with the provisions of the Escrow Agreement, and (y) the Sellers shall, in accordance with provisions of Paragraph (iii) below, pay the amount by which the Remaining Purchaser IP Recovery Cost and Expenses exceed the amount remaining in the Escrow Account to the Purchaser by wire transfer of immediately available Euro funds to such account of the Purchaser as shall have been notified by the Purchaser to the Sellers' Representative for such purpose at the latest five (5) Business Days after the date of the Remaining Purchaser IP Recovery Cost and Expenses Notice. The allocation among the Sellers of the amount to be paid to the Purchaser pursuant to this Paragraph (C)(y), which shall be notified by the Sellers' Representative to the Purchaser at the latest five (5) Business Days after the date of the Remaining Purchaser IP Recovery Cost and Expenses Notice, shall be made under the sole and exclusive responsibility of the Sellers on a basis consistent with the provisions of Section 2.9 below and the Purchaser and the Target Companies shall incur no liability whatsoever in respect thereto.

(iii) Any and all payments pursuant to Section 3.3(d)(ii) above shall be made within ten (10) Business Days from the date of the Remaining Purchaser IP Recovery Cost and Expenses Notice, it being specified that the Sellers' Representative and the Purchaser shall serve to the escrow agent under the Escrow Agreement all necessary or appropriate notices in order to ensure the release of the Amount in Escrow in due time and proportion pursuant to Section 3.3(d)(ii). Any payment required to be made pursuant to Section 3.3(d)(ii) which is not made before the expiry of a thirty-day (30) period from its due date, shall carry interest at the rate of ten (10) percent per annum (on the basis of a year of 365 days) from the due date for payment until (and including) the date of actual payment.

(iv) All interests or revenue of any nature whatsoever deriving from the Amount in Escrow shall be allocated among the Purchaser and the Sellers (other than Montalivet Networks) *pro rata* the portion of the principal of the Amount in Escrow to be released to each of them pursuant to the Escrow Agreement, Section 2.6, Section 3.3(d)(ii) and Section 9.9.

(v) Any payment made by the Sellers pursuant to Section 3.3(d)(ii) above through the release of all or part of the amount remaining in the Escrow Account shall be deemed, for the amount corresponding to the portion of the Remaining Purchaser IP Recovery Cost and Expenses allocated to Montalivet Networks in accordance with the provisions of Section 2.9, which is not paid in cash by Montalivet Networks to the Purchaser pursuant to Section 3.3(d)(ii)(C)(y) above as the case may be, to be made by FPCI Winch Capital 3 for the account of Montalivet Networks, which each Party hereto expressly acknowledges and agrees. FPCI Winch Capital 3 shall be solely and exclusively responsible for recovering such amount from Montalivet Networks and the Purchaser and the Target Companies shall incur no liability whatsoever in respect to such payment by FPCI Winch Capital 3 for the account of Montalivet Networks.

(vi) The Purchaser shall have the right, but not the obligation, to offset any amount due to it by the Sellers under Section 3.3(d)(ii), as converted from Euros into US Dollars by using the Closing Average Exchange Rate, against any amount which may remain payable to the Sellers under this Agreement.

(vii) For the sake of clarity, the Sellers and the Purchaser hereby agree that any payment pursuant to Section 3.3(d)(ii) shall be deemed to constitute an adjustment to the Final Price, and agree to treat any such payment as such for all Taxes, accounting and financial reporting purposes.

3.4 Transfer of Ownership

For the avoidance of doubt, and notwithstanding article 1179 of the French Civil Code (*Code civil*), ownership of the Transferred Securities shall only pass to the Purchaser at the Closing, without any retroactive effect, upon full payment of the Closing Payments.

4. CLOSING

4.1 Date and Place of Closing

Provided that (*x*) each of the Conditions Precedent set forth in Section 3.1 is either satisfied or waived and (*y*) this Agreement has not been previously terminated pursuant to Section 10.1, the Closing shall take place:

(a) at the offices of Shearman & Sterling LLP located at 114, avenue des Champs Elysées, 75008 Paris (France) or at such other place as the Purchaser and the Sellers' Representative may agree upon in writing; and

(b) at a date and time to be set by agreement between the Purchaser and the Sellers' Representative, or failing such agreement, at 9.00 a.m. on the earlier of (i) the seventh (7th) Business Day following the day on which all of the Conditions Precedent set forth in Sections 3.1(a) and (b) are satisfied or waived and (ii) the Long Stop Date. The date on which the Closing shall take place is referred to herein as the "**Closing Date**".

4.2 Closing Payments

The following payments (the "**Closing Payments**") shall be made at Closing:

(a) Payment of the Estimated Initial Price. On the Closing Date, the Purchaser shall pay the Estimated Initial Price in accordance with the provisions of Section 2.4 above.

(b) Repayment of the Existing Indebtedness. On the Closing Date, the Purchaser shall pay for and on behalf of the relevant Target Companies the full amount of the Existing Indebtedness by wire transfer of immediately available Euro funds to such accounts as shall have been notified to the Purchaser by the Sellers' Representative for such purpose in the Pre-Closing Statement.

4.3 Closing Deliveries

(a) At Closing, the Sellers' Representative shall deliver to the Purchaser:

(i) original copies of duly completed and signed transfer forms (*ordres de mouvement*) in favor of the Purchaser with respect to the Transferred Securities effecting the transfer to the Purchaser of all the Transferred Securities as from the Closing Date;

(ii) original copies of duly completed and signed tax transfer forms (*formulaires Cerfa n°2759 DGI*) in respect of all the Shares to be sold in accordance with the terms of this Agreement (three (3) original copies per Seller selling Holding Shares and three (3) original copies per ManCo Shareholder), it being expressly agreed that the Purchaser shall sign such forms;

(iii) the up-to-date transfer registers (*registres des mouvements de titres*) and security holders' accounts (*fiches individuelles de titulaires de titres*) of the Holding and ManCo duly indicating (a) the full completion of the repayment of the ORAs into New Ordinary Shares on the Closing Date, prior to Closing, and (b) the transfer as of the Closing Date to the Purchaser of all the Transferred Securities to be transferred at Closing, free and clear of all Liens, as well as the up-to-date transfer registers (*registres des mouvements de titres*) and security holders' accounts (*fiches individuelles de titulaires de titres*) of Kepler and TVN duly indicating the release as of the Closing Date of the pledges granted on the shares of Kepler and TVN held by the Holding under and/or pursuant to the terms and conditions of the OBSAs;

(iv) original copies of the unconditional resignation letters, effective as of the Closing Date, of the Persons listed in **Schedule 4.3(a)(iv)** (*Persons to resign with effect as of the Closing Date*), from their offices as legal representatives, officers, directors, members of a board, committee or other corporate body of the Target Companies, whereby such Persons acknowledge that no sums are owed to them by the relevant Target Company and irrevocably waive any claims or monies against said Target Company as from the Closing Date;

(v) the original minutes books of the shareholders' meetings and of the meetings or decisions of other existing corporate bodies of the Holding and ManCo;

(vi) certified copies of the minutes of any meeting of the applicable workers' representatives bodies (*instances représentatives du personnel*) of the Group Companies evidencing that the information and consultation process relating to the Transaction has been duly completed prior to the date hereof;

(vii) one (1) original copy of a duly executed irrevocable release letter from the OBSAs holder, or its agent under the terms and conditions of the OBSAs, confirming that the pledges granted by the Holding on the shares of Kepler and TVN it holds, as well as any other Liens granted under and/or pursuant to the terms and conditions of the OBSAs, will be released subject only to, and simultaneously with the payment in accordance with the provisions of Section 2.4 above of the portion of the Estimated Initial Price corresponding to the purchase of any and all the Mezzanine Bonds for an amount equal to the amount of the Mezzanine Debt, as converted from Euros into US Dollars by using the Pre-Closing Exchange Rate;

(viii) twenty (20) original copies of the escrow agreement, the final draft (subject to the comments of the escrow agent under the Escrow Agreement) of which is attached hereto as **Schedule 4.3(a)(viii)** (the "**Escrow Agreement**"), duly signed by the Sellers and the escrow agent under the Escrow Agreement;

(ix) a certified copy of the minutes of the decisions of ManCo's president approving the transfer to the Purchaser of 100% of the share capital and voting rights of ManCo;

(x) notwithstanding the provisions of article 9.2 of the by-laws of ManCo, a certified copy of the minutes of the decisions of ManCo's shareholders taken unanimously in accordance with article

L. 227-19 of the French Commercial Code (*Code de commerce*) expressly releasing the lock-up provided for by article 9.2 of the by-laws of ManCo;

(xi) a certified copy of the minutes of any meeting of the Holding's monitoring committee (*comité de suivi*) evidencing the prior approval by such committee of (a) the Transaction, (b) the implementation and full completion of the IP Recovery prior to Closing, (c) the modification with effect prior to Closing of the Holding's by-laws, the terms and conditions of the ORAs and the terms and conditions of the OCRs in accordance with the provisions of this Agreement and (d) the repayment prior to Closing of the ORAs and the completion prior to Closing of the correlative share capital increase of the Holding;

(xii) a certified copy of a duly executed letter from the OBSAs holder, or its agent under the terms and conditions of the OBSAs, evidencing its prior approval of (a) the Transaction, (b) the implementation and full completion of the IP Recovery prior to Closing, (c) the modification with effect prior to Closing of the Holding's by-laws, the terms and conditions of the ORAs and the terms and conditions of the OCRs in accordance with the provisions of this Agreement and (d) the repayment prior to Closing of the ORAs and the completion prior to Closing of the correlative share capital increase of the Holding;

(xiii) a certified copy of the minutes of the decisions of the Holding's shareholders deciding the modification of the by-laws of the Holding in accordance with the new by-laws of the Holding, the final draft of which is attached hereto as **Schedule 4.3(a)(xiii)** (the "**New Holding By-Laws**");

(xiv) certified copies of (a) the minutes of the decisions of the Holding's shareholders deciding, subject to the approval thereof by the holders of ORAs, the modification of the ORAs in accordance with the new terms and conditions of the ORAs, the final draft of which is attached hereto as **Schedule 4.3(a)(xiv)** (the "**New Terms and Conditions of the ORAs**"), and (b) the minutes of the decisions of the holders of ORAs approving the modification of the terms and conditions of the ORAs in accordance with the New Terms and Conditions of the ORAs;

(xv) certified copies of (a) the minutes of the decisions of the Holding's shareholders deciding, subject to the approval thereof by the holders of OCRs, the modification of the OCRs in accordance with the new terms and conditions of the OCRs, the final draft of which is attached hereto as **Schedule 4.3(a)(xv)** (the "**New Terms and Conditions of the OCRs**"), and (b) the minutes of the decisions of the holders of OCRs approving the modification of the terms and conditions of the OCRs in accordance with the New Terms and Conditions of the OCRs;

(xvi) certified copies of (a) the duly completed and signed subscription forms (*bulletins de souscription*) effecting the subscription for all the New Ordinary Shares prior to Closing and (b) the minutes of the decisions of the relevant Holding's corporate body acknowledging the completion prior to Closing of the share capital increase resulting from the repayment of the ORAs;

(xvii) a true and complete list of all material actions that must be taken within 90 days of the Closing Date with respect to any of the Registered IP;

(xviii) a certified copy of the agreement terminating as of the Closing Date that certain inter-creditors' agreement entered into on October 17, 2014 by and between, *inter alios*, the main creditors of the Holding, as amended from time to time (the "**Existing Inter-Creditors' Agreement**"), whereby each party to the Existing Inter-Creditors' Agreement notably acknowledges that all of its rights under the Existing Inter-Creditors' Agreement have been fully satisfied and that it has

no claim and waives its rights in this respect against the other parties to the Existing Inter-Creditors' Agreement and any of the Target Companies;

(xix) a duly certified certificate from the Sellers' Representative (on behalf of the Sellers) confirming as of the Closing Date that save for what has been set forth in this Agreement or notified pursuant to Section 5.10 of this Agreement as constituting or being likely to constitute a Material Adverse Change, no circumstance, event or fact has occurred since the Reference Date that constitutes or would be likely to constitute a Material Adverse Change;

(xx) one (1) original copy of a letter by the lessor under that certain real estate lease agreement entered into on September 28, 2011 by and between TVN and SCI Cergy Etoile evidencing the prior approval, without any conditions, obligations or requirements, by the latter of the transfer of ManCo's registered office to the address of the property leased thereunder pursuant to any domiciliation agreement (*contrat de domiciliation*) to be entered into by and between ManCo and TVN with effect from or after the Closing Date;

(xxi) a certified copy of the duly executed amendment dated as of or prior to the Closing Date to the patent sublicense agreement entered into on July 12, 2011 by and between Kepler and TVN, the final draft of which is attached hereto as **Schedule 4.3(a)(xxi)** (the "**Amendment to the Patent Sublicense Agreement**");

(xxii) one (1) original copy of the L-Bis extract of the TVN's branch which premises are located in Brest, as duly updated according to the exact address of the rented premises appearing in that certain real estate lease agreement entered into on January 5, 2012 by and between TVN and Diderot Développement;

(xxiii) upon delivery by the Purchaser of any evidence of the full payment of the Closing Payment referred to in Section 4.2(a) in accordance with the provisions of Section 2.4, one (1) original copy of a duly executed confirmatory release letter from the OBSAs holder, or its agent under the terms and conditions of the OBSAs, confirming the full, final and irrevocable release as of the Closing Date of the pledges granted by the Holding on the shares of Kepler and TVN it holds, as well as of any other Liens granted under and/or pursuant to the terms and conditions of the OBSAs;

(xxiv) a certified copy of the Notice of Voluntary Termination (as defined under the IP Agreement) served by Kepler to France Brevets in accordance with Section 3.2.3(b)(i), together with evidence of the receipt by France Brevets of the same on the Closing Date;

(xxv) evidence of the full payment by Kepler of the Transfer Price (as defined under the IP Agreement) in accordance with Section 3.2.3(b)(ii); and

(xxvi) two (2) original copies of the Assignment of Patent Rights dated as of the Closing Date to be entered into by and between France Brevets and Kepler (or such Entity as indicated in the IP Substitution Notice) duly signed by France Brevets.

(b) At Closing, the Purchaser shall deliver to the Sellers' Representative:

(i) evidence of the fulfillment of the Condition Precedent set forth in Section 3.1(a);

(ii) evidence of the full payment of the Closing Payments in accordance with Section 4.2;

(iii) twenty (20) original copies of the Escrow Agreement, duly signed by the Purchaser and the escrow agent under the Escrow Agreement; and

(iv) certified copies of all authorizations necessary for the Purchaser for the execution and consummation of this Agreement and the other Transaction Documents.

4.4 Matters at Closing

All actions to be taken and all documents to be executed and delivered by the Parties at the Closing in accordance with this Section 4 shall be deemed to have been taken and executed simultaneously, and, therefore, no actions or proceedings shall be deemed taken nor any documents shall be deemed executed or delivered until all have been taken, executed and delivered, and title to the Transferred Securities shall not be transferred to the Purchaser which shall have no property rights or interest in the Transferred Securities unless and until the Closing actually takes place and the Closing Payments have been effectively received by the intended recipients thereof.

5. PRE-CLOSING MATTERS

5.1 No Transfer of the Ordinary Shares, the ORAs, the OCRs, the OBSAs and the ManCo Shares, nor of the Transferred Securities

(a) Subject to the provisions of Paragraphs (b) and (c) below, during the period from the date of this Agreement to the Closing, each of the Sellers and ManCo undertakes not to transfer any of the Ordinary Shares, ORAs, OCRs, OBSAs or ManCo Shares it holds on the date hereof, nor any of the Transferred Securities it will own (including, for the avoidance of doubt, those acquired pursuant to Paragraphs (b) and (c) below), to any Person other than the Purchaser or any of its Affiliates.

(b) Notwithstanding anything to the contrary in this Agreement, during the period from the date of this Agreement to the Closing, each of Mrs. Laure Delahousse, Mrs. Camille Delahousse, Mr. Edouard Delahousse and Mrs. Constance Delahousse, on the one hand, and each of Mr. Louis Congard and Mrs. Anne Congard, on the other hand, (i) irrevocably undertakes towards the other Parties to promptly transfer back to, where applicable, Mr. Delahousse or Mr. Congard, the Ordinary Shares transferred to him/her by the latter pursuant to the Put Option Agreement, should he/she not comply with any of his/her obligations under this Agreement, (ii) acknowledges and agrees that forced execution (*execution forcée*) of this obligation may be requested and (iii) irrevocably waives his/her rights under article 1142 of the French Civil Code in such respect.

(c) During the period from the date of this Agreement to the Closing, should any of Mrs. Laure Delahousse, Mrs. Camille Delahousse, Mr. Edouard Delahousse and Mrs. Constance Delahousse, on the one hand, or any of Mr. Louis Congard and Mrs. Anne Congard, on the other hand, not comply with any of his/her obligations under this Agreement, each of Mr. Delahousse or Mr. Congard, where applicable, (i) irrevocably undertakes towards the other Parties to promptly repurchase all the Ordinary Shares transferred to him/her pursuant to the Put Option Agreement, (ii) acknowledges and agrees that forced execution (*execution forcée*) of this obligation may be requested and (iii) irrevocably waives his rights under article 1142 of the French Civil Code in such respect.

5.2 Modification of the Holding's by-laws

Each of the Sellers and Kepler M2, in its quality, where applicable, as (a) holder of Holding Shares, ManCo Shares, ORAs, OCRs or OBSAs, or (b) president of ManCo or the Holding, or (c) holder of Securities of the Holding having the ability under the Existing Holding Shareholders' Agreement to

present candidates among which the members of the Holding's monitoring committee (*comité de suivi*) are appointed by the Holding's shareholders, undertakes to procure that the New Holding By-Laws be in full force and effect on the Closing Date, prior to Closing.

5.3 **Modification of the Terms and Conditions of the ORAs**

Each of the Sellers and Kepler M2, in its quality, where applicable, as (a) holder of Holding Shares, ManCo Shares, ORAs, OCRs or OBSAs, or (b) president of ManCo or the Holding, or (c) holder of Securities of the Holding having the ability under the Existing Holding Shareholders' Agreement to present candidates among which the members of the Holding's monitoring committee (*comité de suivi*) are appointed by the Holding's shareholders, undertakes to procure that the terms and conditions of the ORAs be modified in accordance with the New Terms and Conditions of the ORAs with effect prior to Closing and prior to their repayment in accordance with the provisions of Section 5.5 below.

5.4 **Modification of the Terms and Conditions of the OCRs**

Each of the Sellers and Kepler M2, in its quality, where applicable, as (a) holder of Holding Shares, ManCo Shares, ORAs, OCRs or OBSAs, or (b) president of ManCo or the Holding, or (c) holder of Securities of the Holding having the ability under the Existing Holding Shareholders' Agreement to present candidates among which the members of the Holding's monitoring committee (*comité de suivi*) are appointed by the Holding's shareholders, undertakes to procure that the terms and conditions of the OCRs be modified in accordance with the New Terms and Conditions of the OCRs with effect prior to Closing.

5.5 **Repayment of the ORAs**

Each of the Sellers and Kepler M2, in its quality, where applicable, as (a) holder of Holding Shares, ManCo Shares, ORAs, OCRs or OBSAs, or (b) president of ManCo or the Holding, or (c) holder of Securities of the Holding having the ability under the Existing Holding Shareholders' Agreement to present candidates among which the members of the Holding's monitoring committee (*comité de suivi*) are appointed by the Holding's shareholders, undertakes to procure that the repayment of the ORAs into New Ordinary Shares be fully completed and such completion acknowledged on the Closing Date, prior to Closing.

5.6 **No Conversion of the OCRs**

During the period from the date of this Agreement to the Closing, each of Montalivet Networks and Mr. de Puyfontaine undertakes not to convert any of the OCRs it holds on the date hereof.

5.7 **No Exercise of the Mezzanine Warrants**

During the period from the date of this Agreement to the Closing, FPCI CIC Mezzanine 3 undertakes not to exercise any of the Mezzanine Warrants it holds on the date hereof.

5.8 **Pre-Closing Statement**

(a) No later than five (5) Business Days prior to the Closing Date, the Sellers' Representative shall deliver to the Purchaser a statement prepared pursuant to **Schedule 5.8** (the "**Pre-Closing Statement**") setting forth:

(i) its determination, in accordance with the Closing Accounts Accounting Principles, of (A) the amounts of (i) the Estimated Cash, the Estimated Debt and the Estimated Net Cash, (ii) the Estimated Working Capital, the Estimated Normative Working Capital and the Estimated Working Capital Adjustment, (iii) the Estimated ManCo Cash, the Estimated ManCo Debt and the Estimated ManCo Net Cash, (iv) the Estimated ManCo Working Capital, the Estimated ManCo Normative Working Capital and the Estimated ManCo Working Capital Adjustment and of (B) the

Pre-Closing Exchange Rate, together with such reasonable details and documentation as the Sellers have in support of the calculation of such estimates;

(ii) its determination of the Estimated Initial Price calculated in accordance with Section 2.3 above;

(iii) an updated version as at the Closing Date and immediately prior to the completion of the transfer to the Purchaser of the Transferred Securities of the table appearing on **Schedule B** and/or of the table appearing on **Schedule C**;

(iv) the allocation of the Estimated Initial Price among the Sellers, as well as the allocation of the portion of the Estimated Initial Price to be paid on the Closing Date by the Purchaser to each of the Sellers pursuant to Sections 2.4(b) and 4.2 above by wire transfer of immediately available US Dollar funds promptly after payment of the Amount in Escrow into the Escrow Account, together with the corresponding dollar-denominated bank accounts of the Sellers into which the relevant portion of the remaining portion of the Estimated Initial Price shall be paid; and

(v) the total amount of the Existing Indebtedness as at the Closing Date and immediately prior to Closing, and the portion of the Existing Indebtedness due by each Target Company to each lender under the Existing Loan Agreements, together with the corresponding euro-denominated bank accounts of the lenders under the Existing Loan Agreements into which their respective portion of the Existing Indebtedness shall be paid on the Closing Date by the Purchaser (for and on behalf of the relevant Target Companies) by wire transfer of immediately available Euro funds pursuant to Section 4.2 above.

(b) In case of disagreement on any of the estimated amounts listed in Paragraphs 5.8(a)(i) and 5.8(a)(ii) above (the "**Estimated Amounts**") as set forth in the Pre-Closing Statement, the Purchaser shall notify the Sellers' Representative its disagreement and provide the Sellers' Representative with the reasons for such disagreement and the adjustments that, in its opinion, should be made to the disputed items. The Purchaser and the Sellers' Representative shall discuss in good faith the objections of the Purchaser on such disputed items and shall use their reasonable endeavors to reach an agreement on the adjustments to be made to the Estimated Amounts prior to Closing. In the event such an agreement is reached, a revised version of the Pre-Closing Statement will be substituted to the one provided to the Purchaser pursuant to Paragraph (a) above. In the absence of such an agreement, the Pre-Closing Statement provided to the Purchaser pursuant to Paragraph (a) above shall prevail.

(c) The allocation of the Estimated Initial Price among the Sellers shall be made under the sole and exclusive responsibility of the Sellers in accordance with the provisions of Section 2.9 above and the Purchaser and the Target Companies shall incur no liability whatsoever in respect thereto.

5.9 Management between the date hereof and the Closing Date

During the period from the date of this Agreement to the Closing, except as may be (*x*) required by applicable Laws or any Governmental Authority or (*y*) expressly contemplated elsewhere in this Agreement, or (*z*) consented to in writing by the Purchaser (which consent shall not be unreasonably withheld or delayed, having due consideration for the interests of the Group Companies and ManCo), the Sellers and ManCo, within the limits of their respective authority as shareholder, officer, director or employee of the Target Companies, undertake to:

(a) procure that the Target Companies will carry on their activities only in the ordinary course of business, with due care and attention as *bon père de famille* (*de façon prudente, diligente et soigneuse*) and in substantially the same manner as heretofore conducted, so as to preserve in all material respects their businesses and their relationships with Third Parties including their customers; and

(b) without limiting the general scope of Paragraph (a) above, prevent each of the Group Companies and ManCo from:

(i) amending its Organizational Documents (except for adopting the New Holding By-Laws and acknowledging the Holding's share capital increase resulting from the repayment of the ORAs);

(ii) declaring, setting aside, making or paying any dividend, interim dividend or other distribution in respect of its share capital (in cash or otherwise), purchasing or redeeming any shares in its share capital or otherwise decreasing its share capital;

(iii) issuing or selling any shares in its share capital or any options, warrants or other rights to purchase any such shares or any Securities convertible into or exchangeable for such shares; provided that, for the avoidance of doubt, nothing herein shall prevent (*x*) a Seller from transferring Transferred Securities pursuant to Section 5.1 and (*y*) the Holding from issuing New Ordinary Shares for repayment of the ORAs;

(iv) except as expressly provided herein, amending or waiving any provisions of the terms and conditions of and/or subscription agreements applicable to any of the Securities of the Holding, ManCo and TVN or amending the terms and conditions of the Existing Loan Agreements;

(v) acquiring Securities issued by an Entity which is not a Target Company or any business of an Entity which is not a Target Company or merging with or into another Entity which is not a Target Company;

(vi) except as expressly provided herein, acquiring or disposing (or agreeing to acquire or dispose) of any asset having a total value in excess of hundred thousand Euros (€100,000), acquiring or setting up companies or joint ventures, approving a winding-up, merger, split-up, contribution or sale of business as a whole or of any divisions or change of corporate form;

(vii) creating any Lien on any asset or incurring additional indebtedness or off-balance sheet liabilities or granting any loan, other than (*x*) in the ordinary course of business and in accordance with past practices of the Target Companies, (*y*) only by drawing on existing lines of credit, and (*z*) to the extent permitted under the terms and conditions of the OBSAs, or modifying, as compared to past practice, or reimbursing or prepaying voluntarily any indebtedness;

(viii) managing its working capital in a way that would be inconsistent with past practices;

(ix) amending or waiving any provisions or making any written request requiring the approval of requisite lenders under the terms and conditions of the OBSAs, to the exception of purely technical matters in relation with the transactions contemplated under this Agreement;

(x) entering into any Guarantee, indemnity or other agreement to secure the obligation of any third party other than another Target Company in the ordinary course of business;

(xi) entering into any agreement or arrangement or performing any transactions with any of its Affiliates or of the Sellers or their Affiliates or Connected Persons that are not enacted during the ordinary course of business and on an arms' length basis or amending existing agreements or arrangements entered into with any of its Affiliates or of the Sellers or their Affiliates or Connected Persons;

(xii) amending or terminating any Material Contract or making a significant change in the business relationship with any significant customers or suppliers;

(xiii) entering into, other than in the ordinary course of business, any agreement with any existing or new client/customer involving a total amount in excess of one million Euros (€1,000,000) or accepting, other than in the ordinary course of business, any new order from a client for an amount in excess of one million Euros (€1,000,000);

(xiv) placing any new order before a supplier for an amount in excess of five hundred thousand Euros (€500,000);

(xv) except as expressly provided herein and safe for what falls within the scope of Paragraphs (xiii) and (xiv) above, incurring or entering into any agreement or commitment involving any capital expenditure or liabilities or any undertaking in excess of an amount of three hundred thousand Euros (€300,000) or with a fixed duration exceeding twelve months;

(xvi) launching any new activities or new products or becoming involved in any new research and development program for which it may bear costs in excess of one hundred fifty thousand euros (€ 150,000);

(xvii) terminating, suffering any cancellation, termination or non-renewal of any of its Insurance Policies unless simultaneously replaced by other policies providing substantially the same coverage;

(xviii) transferring, other than in the ordinary course of business, cash or cash equivalents to any Seller or any of its Affiliates or Connected Persons;

(xix) hiring any new employee or terminating any employee, for a gross annual remuneration and other benefits in excess of fifty thousand Euros (€50,000) individually;

(xx) making any amendment to the terms and conditions of employment or services (including, without limitation, remuneration, benefits, severance payments and other benefits) of any employee, legal representative, officer, director, member of a board, committee or other corporate body of any Target Company, or providing or agreeing to provide any gratuitous payment or benefit, representing an amount superior to (a) ten thousand Euros (€10,000) per individual or Entity concerned and to (b) hundred thousand Euros (€100,000) in the aggregate;

(xxi) concluding any agreement, plan or arrangement with labour unions or for the benefit of the employees generally resulting in an increase of the compensation payable or to become payable to the employees of any Target Company or an increase of the other benefits;

(xxii) making any single payment exceeding in total one hundred thousand Euros (€100,000), excluding payments made in the ordinary course of business in respect of employees, Taxes and rents and purchases of good and services;

(xxiii) amending its accounting or tax principles and methods;

(xxiv) making any settlement or undertaking to make any such settlement in any Proceedings, except to the extent that the financial consequences thereof had been fully reserved for in its accounts; and

(xxv) committing to take any of the actions set forth in the foregoing Pargraphs (i) through (xxiv).

For the purposes of granting any consents which may be requested by the Sellers' Representative, a Group Company or ManCo pursuant to this Section 5.9, the Purchaser hereby designates Mr. Shahar Bar with immediate effect and represents and warrants to, and agrees with, the Sellers' Representative, each of the Sellers and ManCo that Mr. Shahar Bar shall have full capacity and right to give any such consents on behalf of the Purchaser during the term of this Agreement. Within three (3) Business Days of receipt of any request for consent by the Sellers' Representative, a Group Company or ManCo, Mr. Shahar Bar, on behalf of the Purchaser, shall have the right to notify the Sellers' Representative, the relevant Group Company or ManCo that the Purchaser objects to the proposed action (which notice of objection shall indicate its reasons for so objecting). If Mr. Shahar Bar, on behalf of the Purchaser, shall not have notified the Sellers' Representative, the relevant Group Company or ManCo, as the case may be, of the Purchaser's objection to a proposed action within such period of three (3) Business Days, the Purchaser shall be deemed to have consented to such proposed action.

5.10 Notifications

(a) During the period from the date of this Agreement to the Closing, the Sellers' Representative shall promptly notify the Purchaser of the occurrence (or non-occurrence) of any event, the occurrence (or non-occurrence) of which constitutes or would be likely to constitute:

(i) a breach or inaccuracy of any representations and warranties made by the Sellers under Section 8; or
(ii) a Material Adverse Change;

such notice by the Sellers' Representative to include (i) all relevant details to provide disclosure as complete and fair as possible to the Purchaser of such development and (ii) if applicable, an updated version of any impacted Schedule.

(b) In the event that the Purchaser is notified pursuant to Paragraph (a) above of the occurrence (or non-occurrence) of an event, the occurrence (or non-occurrence) of which constitutes a Material Adverse Change, the Purchaser may elect not to proceed to Closing and to terminate this Agreement in accordance with Section 10.1.

5.11 Access to Target Companies

During the period from the date of this Agreement to the Closing, upon the reasonable written request of the Purchaser and subject to compliance by the Purchaser and its advisors with the terms of the Confidentiality Agreement, the Sellers' Representative (on behalf of all the Sellers) shall use its commercially reasonable endeavors to arrange for the Purchaser and its representatives and agents to be

granted reasonable access during normal business hours to each Target Company's documents and senior management as the Purchaser may reasonably require in order to ensure a timely and efficient Closing of the Transaction, provided that such access shall not interfere with the normal business and operations of the Target Companies.

5.12 Existing Shareholders' Documents

(a) During the period from and including the date hereof until and including the Closing Date, each of the Sellers and Kepler M2 undertakes not to exercise and to waive any of its rights under the Existing Shareholders' Documents to which it is a party, the Holding's by-laws, the New Holding By-Laws and Kepler M2's by-laws that may prevent the consummation of the transactions contemplated by this Agreement.

(b) Each of the Sellers and Kepler M2, in its quality as (a) holder of Holding Shares, ManCo Shares, ORAs, OCRs or OBSAs, or (b) president of ManCo or the Holding, or (c) holder of Securities of the Holding having the ability under the Existing Holding Shareholders' Agreement to present candidates among which the members of the Holding's monitoring committee (*comité de suivi*) are appointed by the Holding's shareholders, undertakes, where applicable, (A) to be present or represented, or to have the members of the Holding's monitoring committee (*comité de suivi*) which it has proposed be present or represented, for the corporate decisions mentioned in Section 4.3 and to exercise all available voting rights to vote in favor of such decisions or (B) to take the corporate decisions mentioned in Section 4.3.

(c) Each of the Sellers and Kepler M2 acknowledges and accepts that the Existing Shareholders' Documents to which it is a party shall automatically terminate at the Closing, provided that all the transactions contemplated hereby have been completed. If so, each of the Sellers and Kepler M2 acknowledges that all of its rights under the Existing Shareholders' Documents have been fully satisfied and that it has no claim and waives its rights in this respect against the Holding, Kepler M2 and the other Sellers.

(d) Should this Agreement terminate and/or the transactions contemplated hereby be abandoned for any reason whatsoever, then the Existing Shareholders' Documents shall remain in full force and effect and the Sellers and Kepler M2 shall be automatically released from their undertaking set forth in Paragraphs (a), (b) and (c) of this Section 5.12.

5.13 Exclusivity

(a) During the period from the date of this Agreement to the Closing, the Sellers shall not, and shall procure that the Target Companies shall not, directly or indirectly:

(i) enter into a Contract for the transfer, by any means, of substantial assets of any of the Target Companies or acquisition of all or part of the equity interests in or of any of the Target Companies, the merger, spin-off, contribution, business combination, recapitalization, or similar transaction involving any of the Target Companies other than the transactions contemplated hereby (any of the foregoing being referred to as an "**Acquisition Proposal**");

(ii) solicit, initiate or encourage any inquiries or proposals that constitute or could reasonably constitute an Acquisition Proposal;

(iii) initiate or engage in negotiations with any Person (or group of Persons) other than the Purchaser or its Affiliates (a "**Potential Bidder**") concerning any Acquisition Proposal; provided, however, to the extent that any of the foregoing have already occurred, they shall be suspended or terminated during the period from the date of this Agreement to the Closing; and

(iv) undertake any action which may jeopardize the Transaction.

(b) During the period from the date of this Agreement to the Closing, the Sellers shall, and shall procure that the Target Companies shall, immediately notify the Purchaser of any contacts received by them or any of their representatives or advisors or Affiliates or Connected Persons from a Potential Bidder to discuss or negotiate a possible Acquisition Proposal. Such notice shall indicate in reasonable detail the identity of the Potential Bidder and the content of the discussion or Acquisition Proposal, if one was made.

5.14 Prior Approval under Change of Control Provisions

Prior to the Closing Date and, in case of failure to obtain such prior approvals or consents prior to Closing, after the Closing Date, the Sellers undertake to use their best efforts to, prior to Closing, obtain, and, after Closing, assist the Purchaser and the Target Companies in obtaining any Third Parties' approvals or consents under provisions of agreements in full force and effect to which any of the Target Companies is a party, pursuant to which (a) said agreements may, as a result of the Transaction, be terminated or (b) the performance or renewal of said agreements (including conditions thereof) may, as a result of the Transaction, be otherwise affected.

6. POST-CLOSING COVENANTS

6.1 SEC Filing

The Purchaser (or any of its Affiliates) shall be entitled to include the Required Financials and/or any information contained in the Required Financials in a filing made by the Purchaser (or any of its Affiliates) with the SEC after Closing, should this be necessary or appropriate in connection with the Purchaser (or any of its Affiliates) satisfying its reporting obligations under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, which the Sellers expressly acknowledge and agree, provided that the Purchaser shall notify the Sellers' Representative prior to any such inclusion and shall use its commercially reasonable endeavors to consult in good faith with the Sellers' Representative about any such inclusion and to take into account the reasonable comments and suggestions made by the Sellers' Representative in respect of any such inclusion.

6.2 Records

During the period from the Closing Date through the fifth anniversary of the Closing Date:

(a) The Purchaser shall not, and shall procure that no member of the Target Companies does, destroy or otherwise dispose of any of the books and records of any Target Company existing as of the Closing Date, except with the prior written consent of the Seller, which consent shall not be unreasonably withheld ; and

(b) The Purchaser shall grant to the Sellers and their respective representatives and agents, and shall procure that the Target Companies grant to the Sellers and their respective representatives and agents, upon written

request, reasonable access (including the right to make extracts and take copies at the requesting Party's cost) to such books and records of any Target Company existing as of the Closing Date (to the extent the relevant Target Company is controlled by the Purchaser at the date of the request), for periods prior to and including the Closing Date, during normal business hours, as may be reasonably requested by any Seller to the extent that the related information is reasonably required by the Sellers in connection with any Proceedings brought by or involving a Governmental Authority, provided that such access shall not interfere with the normal business and operations of the Target Companies.

6.3 Non Solicitation

Each of the Sellers undertakes, on its behalf and on behalf of its Affiliates, for a period from the date hereof until the second anniversary of the date hereof, not to, directly or indirectly, alone or jointly with or through any other Person, solicit or encourage the officers, managers or employees in a skilled or managerial position of the Target Companies to leave their current or future positions within the Target Companies, or hire or contract for services with such Persons directly or indirectly.

6.4 Non Bashing

Each Seller undertakes not to, directly or indirectly, do or say anything which might be harmful to the business of the Target Companies, or which may lead a Person who has dealt with the Target Companies or the business of the Target Companies to cease to deal with the Target Companies or the business of the Target Companies (or materially reduce its relations) on terms substantially equivalent to those previously offered or at all.

Each Party commits not to make any communication or statement in public or to any media whatsoever regardless of its nature or support, likely to damage directly or indirectly the image, reputation or affairs of any of the other Parties.

7. REPRESENTATIONS OF THE PURCHASER

The Purchaser hereby represents and warrants to the Seller, as of the date hereof and as of the Closing Date (except for such representations which are expressly made as of the date hereof or as of the Closing Date and are therefore made on such a date only), as set forth below.

7.1 Organization, Authority and Validity

7.1.1 The Purchaser is a company (*société par actions simplifiée*) duly organized and validly existing under the laws of France, is not in a state of insolvency (*en état de cessation des paiements*), nor subject to any Bankruptcy Proceedings and no facts exist that would result in any such event occurring. The Purchaser has the corporate power and authority to enter into this Agreement and the other Transaction Documents to which it is a party, as the case may be, to perform its obligations hereunder and thereunder and to consummate the transactions contemplated hereby and thereby.

7.1.2 The execution of this Agreement and of the other Transaction Documents to which the Purchaser is a party, as the case may be, and the consummation of the transactions contemplated hereby and thereby have been duly authorized by the competent corporate bodies of the Purchaser, and no other corporate action on the part of the Purchaser is necessary to authorize the execution of this Agreement or of the other Transaction Documents to which the Purchaser is a party, as the case may be, or the consummation of any of the transactions contemplated hereby and thereby.

7.1.3 This Agreement and the other Transaction Documents to which the Purchaser is a party, as the case may be, have been duly executed by the Purchaser and constitute, and shall constitute, legal, valid and binding obligations of the Purchaser, enforceable against it in accordance with their respective terms.

7.2 **<u>No Breach</u>**

Neither the entering into of this Agreement or of the other Transaction Documents to which the Purchaser is a party, as the case may be, nor the performance by the Purchaser of its obligations hereunder or thereunder, nor the consummation of the transactions contemplated herein or therein does or will:

(a) conflict with or violate any provision of the Organizational Documents of the Purchaser;

(b) violate, conflict with or result in the breach or termination of, or constitute a default or event of default (or an event which with notice, lapse of time, or both, would constitute a default or event of default), under the terms of, any Contracts or Governmental Authorizations to which the Purchaser or any of its Affiliates is a party or by which the Purchaser or any of its Affiliates is bound; or

(c) subject to the obtaining of the FMEF Clearance, constitute a violation by the Purchaser or any of its Affiliates of any applicable Laws or Judgments, except for any such matters that would not, either individually or in the aggregate, have a material adverse effect on the ability of the Purchaser to perform its obligations under this Agreement or the other Transaction Documents to which it is a party, as the case may be.

7.3 **<u>Governmental Authorizations, Consent</u>**

Other than the FMEF Clearance, no Governmental Authorization or other third party consent is required to be made or obtained by the Purchaser or any of its Affiliates prior to the Closing in connection with: (a) the entering into of this Agreement by the Purchaser, (b) the performance by the Purchaser of its obligations hereunder, or (c) the consummation of any of the transactions contemplated by this Agreement.

7.4 **<u>Financing</u>**

As of the Closing Date, the Purchaser will have immediately available, on an unconditional basis, the sufficient cash resources required to proceed with the payment of the Closing Payments and of any expenses incurred by the Purchaser in connection with the transactions contemplated by this Agreement.

7.5 **<u>Acknowledgements</u>**

(a) The Purchaser acknowledges and agrees that:

(i) it and its advisors carried out an independent due diligence of the Target Companies consisting in (<u>*x*</u>) reviewing and analyzing the documents communicated to the Purchaser and its advisors or made available to them in the Data Room and (<u>*y*</u>) asking written and oral questions and analyzing the answers to such questions and documents relating thereto;

(ii) it and its advisors have had access to the senior management of the Target Companies, notably during management presentations; and

(iii) in entering into this Agreement, it has relied (a) upon its own review and analysis of the documents and information made available to it and its advisors in the Data Room or otherwise communicated to it and its advisors, (b) upon the discussions it and its advisors have had with the management of the Target Companies, (c) upon the representations and warranties of the Sellers expressly set forth in this Agreement and (d) upon its own analysis of the Target Companies and the business of the Target Companies.

(b) In connection with its investigations of the Target Companies, the Purchaser may have received from the Sellers, the Target Companies and/or their respective Affiliates or Connected Persons certain projections, forecasts and/or business plan information on the Target Companies. The Purchaser acknowledges that the Sellers and their Connected Persons do not make any representation or warranty, whether express or implied, neither with respect to such projections, forecasts and/or business plan information nor with respect to market perspectives, products' adequacy to Target Company's markets and future financial or business prospects of the Target Companies.

(c) The Purchaser further acknowledges that no representations and warranties have been made in connection with this Agreement other than those expressly set forth in this Agreement and that the representations and warranties expressly set forth in this Agreement in any event supersede any earlier representations and warranties, which may have been made in connection with this Agreement.

8. REPRESENTATION OF THE SELLERS

8.1 General Representations by each Seller Individually

Each of the Sellers hereby represents and warrants, except as set forth or included in the Disclosure Schedules, to the Purchaser (with respect to this Section 8.1, only as to itself (and not as to any other Seller), in its name and on its own behalf, or only as to the Ordinary Shares, ORAs, OCRs, OBSAs and ManCo Shares it owns and to the Transferred Securities it will own), as of the date hereof and as of the Closing Date (except for such representations which are expressly made as of the date hereof or as of the Closing Date and are therefore made on such date only), as set forth below.

8.1.1 Organization, Authority and Validity

(a) Each Seller which is not an individual is duly organized, validly existing and in good standing under the Laws of its jurisdiction of incorporation or formation and has all requisite corporate power and authority to own its assets and conduct its business as it has been and is now being conducted.

(b) Each Seller which is not an individual is not or has not been in a state of insolvency (*en état de cessation des paiements*), nor subject to any Bankruptcy Proceedings and no facts exist that would result in any such event occurring.

(c) Each Seller has the legal capacity or corporate power and authority and all rights to enter into this Agreement and the other Transaction Documents to which it is a party, as the case may be, to perform its obligations hereunder and thereunder and to consummate the transactions contemplated hereby and thereby.

(d) The execution of this Agreement and of the other Transaction Documents to which the relevant Seller is a party, as the case may be, and the consummation of the transactions contemplated hereby and thereby have been duly authorized by the competent corporate bodies of each Seller which is not an individual, and no other corporate action on the part of each of such Sellers is necessary to authorize the execution of this Agreement or of the other Transaction Documents to which the relevant Seller is a party, as the case may be, or the consummation of any of the transactions contemplated hereby and thereby.

(e) This Agreement and the other Transaction Documents to which the relevant Seller is a party, as the case may be, have been duly executed by each Seller and constitute, and shall constitute, legal, valid and binding obligations of each Seller, enforceable against it in accordance with their respective terms.

8.1.2No breach

Neither the entering into of this Agreement or of the other Transaction Documents to which each Seller is a party, as the case may be, nor the performance by each Seller of its obligations hereunder or thereunder, nor the consummation of the transactions contemplated herein or therein does or will:

(a) conflict with or violate any provision of the Organizational Documents of the relevant Seller (if such Seller is not an individual);

(b) violate, conflict with or result in the breach or termination of, or constitute a default or event of default (or an event which with notice, lapse of time, or both, would constitute a default or event of default), under the terms of, any Contracts or Governmental Authorizations to which the relevant Seller or any of its Affiliates (other than the Target Companies) is a party or by which such Seller or any of its Affiliates (other than the Target Companies) is bound; or

(c) subject to the obtaining of the FMEF Clearance, constitute a violation by the relevant Seller or any of its Affiliates (other than the Target Companies) of any applicable Laws or Judgments, except for any such matters that would not, either individually or in the aggregate, have a material adverse effect on the ability of such Seller to perform its obligations under this Agreement or the other Transaction Documents to which it is a party, as the case may be.

8.1.3Governmental Authorizations, Consent

Other than the FMEF Clearance, no Governmental Authorization or other third party consent is required to be made or obtained by each Seller or any of its Affiliates (other than the Target Companies) prior to the Closing in connection with: (a) the entering into of this Agreement by the relevant Seller, (b) the performance by the relevant Seller of its obligations hereunder, or (c) the consummation of any of the transactions contemplated by this Agreement.

8.1.4Transferred Securities

(a) On the date hereof, each Seller has full and valid title to the number of Ordinary Shares, ORAs, OCRs and OBSAs set out opposite its name in **Schedule B** and/or to the number of ManCo Shares set out opposite its name in **Schedule C**, which are, on the date hereof, validly issued, fully paid up and validly owned by the relevant Seller. Each Permitted Transfer (as such term is defined under the Put Option Agreement) has been made by, where applicable, Mr. Delahousse or Mr. Congard in compliance with the provisions of the Holding's by-laws, the applicable Existing Shareholders' Documents, the terms and conditions of the OBSAs and the provisions of the Existing Inter-Creditors' Agreement.

(b) On the Closing Date and immediately prior to Closing, each Seller will have full and valid title to the number and category of Transferred Securities set out opposite its name in the updated version as at the Closing Date and immediately prior to the completion of the transfer of the Transferred Securities of **Schedule B** and **Schedule C**, as notified by the Sellers' Representative to the Purchaser in the Pre-Closing Statement, which it will sell to the Purchaser, and such Transferred Securities will, on the Closing Date and immediately prior to Closing, be validly issued, fully paid up, validly owned by the relevant Seller, freely transferable to the Purchaser and free and clear of any Lien.

8.1.5 Specific Representation by FPCI Winch Capital 3 regarding Montalivet Networks

FPCI Winch Capital 3 holds 100% of the share capital and voting rights of Montalivet Networks on a fully diluted basis and will, until the payment obligations of Montalivet Networks provided under Sections 2.6 and 3.3(d)(ii) above are irrevocably and indefeasibly performed in accordance with the provisions of this Agreement, (i) continue to be the sole owner of 100% of the share capital and voting rights of Montalivet Networks on a fully diluted basis and (ii) refrain from liquidating or winding-up Montalivet Networks or, more generally, taking or committing to take any action which would, immediately or in the future, result in Montalivet Networks not existing anymore. Notwithstanding anything to the contrary in this Agreement, FPCI Winch Capital 3 hereby undertakes to indemnify and hold harmless the Purchaser, on a "euro" for "euro" basis (without application of any multiple or formula) from any Loss incurred by the Purchaser or any of the Group Companies in connection with any breach or inaccuracy of the representation and warranty made by it under this Section 8.1.5.

8.2 Additional Representations by the Sellers Individually but not Jointly (*conjointement mais non solidairement*)

(a) With respect to Subsections 8.2.1, 8.2.22, 8.2.23 and 8.2.25 below, the Sellers hereby represent and warrant individually and not jointly (*conjointement mais non solidairement*) (but, for the avoidance of doubt, without prejudice to the provisions of Section 11.10, which shall apply), except as set forth or included in the Disclosure Schedules, to the Purchaser, as of the date hereof and as of the Closing Date (except for such representations which are expressly made as of the date hereof or as of the Closing Date and are therefore made on such date only), as set forth below.

(b) With respect to any Subsection of this Section 8.2 other than Subsections 8.2.1, 8.2.22, 8.2.23 and 8.2.25 below, the Sellers (other than FPCI Winch Capital 3, Montalivet Networks, Mr. de Puyfontaine and FPCI CIC Mezzanine 3) hereby represent and warrant individually and not jointly (*conjointement mais non solidairement*) (but, for the avoidance of doubt, without prejudice to the provisions of Section 11.10, which shall apply), except as set forth or included in the Disclosure Schedules, to the Purchaser, as of the date hereof and as of the Closing Date (except for such representations which are expressly made as of the date hereof or as of the Closing Date and are therefore made on such date only), as set forth below, it being expressly specified and agreed that notwithstanding the foregoing, each Indemnifying Seller (including FPCI Winch Capital 3, Mr. de Puyfontaine and FPCI CIC Mezzanine 3) shall indemnify and hold harmless the Purchaser against and in respect of any and all Losses arising out of a breach of any representation and warranty made under the Subsections referred to above in accordance with the provisions of Section 9 below.

8.2.1 Capital Structure - Transaction Perimeter

(a) The Ordinary Shares, ORAs, OCRs and OBSAs represent 100% of the capital and voting rights of the Holding on a fully diluted basis. On the Closing Date, except for the Holding Shares, the OCRs and the OBSAs, the Holding has not issued, nor approved the issuance of, any shares, warrants or Securities of

any nature whatsoever; and there are no options or other agreements or undertakings pursuant to which the Holding is or may become obliged to issue any shares, warrants or other Securities of any nature whatsoever.

(b) The ownership of the share capital of the Group Companies other than the Holding is as shown in **Schedule F** (*Chart of the Group Companies*) and, except for minority interests owned as short-term investments (such as *valeurs mobilières de placement*), none of the Group Companies holds any other interest, directly or indirectly, in any Entity which is not listed in **Schedule F**, nor is a party to any agreement relating thereto.

(c) The capital of each of the Group Companies other than the Holding, together with a true and complete list of their respective Security holders and the number of Securities issued by any of such Group Companies and held by each Security holder is set out in **Schedule 8.2.1(c)** (*Security holding of the Group Companies other than the Holding*). None of the Group Companies other than the Holding has issued any Securities other than those identified in **Schedule 8.2.1(c)**. There are no agreements providing for the issuance by any of the Group Companies of other Securities.

(d) The share capital of each of the Group Companies other than the Holding is validly issued and fully paid-up, and save for the TVN ORANs, there exist no Securities, options or other rights owned by third parties giving access immediately or in the future to the share capital of the Group Companies other than the Holding.

(e) None of the Securities issued by the Group Companies is listed on any stock exchange or registered on any unlisted market. None of the Group Companies has made or taken any steps to make any public offering (*offre au public*) of Securities.

(f) Subject to the release of the Liens existing in relation to the terms and conditions of the OBSAs upon completion of the Transaction, the Securities owned by each of the Group Companies in another Group Company are free and clear of all Liens.

(g) Each Group Company is duly organized, validly existing and in good standing under the Laws of its jurisdiction of incorporation or formation, and has all requisite corporate power and authority to own its assets and conduct its business as it has been and is now being conducted by the Sellers.

(h) None of the Group Companies is or has been insolvent (*en état de cessation de paiements*) nor subject to any Bankruptcy Proceedings and no facts exist that would result in any such event occurring.

8.2.2Group Companies

(a) A true, accurate and complete copy of the by-laws and of the certificates of incorporation of each Group Company is set out in **Schedule 8.2.2(a)** (*By-laws and certificates of incorporation of the Group Companies*).

(b) The management bodies of each Group Company have taken all decisions required by applicable Laws. All topics relating to the Group Companies required to be transacted or discussed by the management bodies of the Group Companies pursuant to applicable Laws and their respective by-laws have been transacted and discussed by such bodies. More generally, all corporate decisions made by the management bodies of each Group Company have been made when required by and in compliance with applicable Laws, their respective by-laws and with any agreements to which such Group Company is a party. All

publications, filings, registrations or other formalities related to such corporate decisions have been performed in compliance with applicable Laws.

(c) All registers, minutes, books, accounting and corporate documents of each Group Company have been properly and regularly maintained, are in the possession of the relevant Group Company and give a true, accurate and complete view of the activities of each Group Company as required by applicable Laws.

(d) None of the Group Companies serves as a legal or *de facto* manager in any Entity other than the Group Companies. None of the Group Companies has any outstanding (conditional or not) obligation or liability with respect to any of its former shareholdings or involvement as a legal or *de facto* manager in any Entity whatsoever.

(e) Save for the Existing Holding Shareholders' Agreement, which shall automatically terminate at Closing pursuant to Section 5.12 above, none of the Group Companies has entered into any agreements governing their rights and obligations as shareholder of any Entity.

8.2.3Accounts

(a) The individual corporate Accounts of each Group Company, as attached as **Schedule 8.2.3(a)** (*Individual corporate Accounts of the Group Companies*):

(i) have been prepared on a consistent basis in accordance with French GAAP;

(ii) are accurate and complete (*réguliers et sincères*) and present a true and fair view (*donnent une image fidèle*) of the assets, financial condition and results of operations of such Group Company, in compliance with the provisions of article L. 123-14 of the French Commercial Code or any applicable Laws, as of the date and for the periods covered thereby;

(iii) when audited, have been certified without qualification by the statutory auditors of such Group Company and, when relating to a full financial year, have been approved at the ordinary general meeting of its shareholders without (*x*) qualification (*sans réserve*) or (*y*) modification in accordance with applicable Laws and such Group Company's by-laws.

(b) The combined Accounts of the Group Companies, as attached as **Schedule 8.2.3(b)** (*Combined Accounts of the Group Companies*):

(i) have been prepared on a consistent basis in accordance with French GAAP;

(ii) are accurate and complete (*réguliers et sincères*) and present a true and fair view (*donnent une image fidèle*) of the assets, financial condition and results of operations of the group formed by the Group Companies included in the scope of the combination, in compliance with the provisions of article L. 233-21 of the French Commercial Code, as of the date and for the periods covered thereby.

(c) All liabilities of any Group Company, whether contingent or not, are duly reflected in the Accounts in accordance with, and to the extent required by, French GAAP and are adequately provided for or reserved against in the Accounts in accordance with French GAAP.

(d) All expenses and foreseeable losses pertaining to all Contracts have been fully provided for in the Accounts.

(e) The Required Financials relating to the Group Companies, when delivered, will (i) have been derived from the books and records of the Group Companies, (ii) be true and correct in all material respects and

(iii) fairly present the consolidated financial position, results of operations and cash flows of the Group Companies at the date and for the periods indicated therein, except as indicated in the footnotes thereto.

8.2.4Financial Matters

(a) **Schedule 8.2.4(a)** (*Existing Indebtedness under which any Group Company is a debtor*) provides a true and complete description of all existing Indebtedness under which any Group Company is a debtor. **Schedule 8.2.4(a)** indicates, for each Indebtedness, the identity of the lender(s), the initial principal amount, the outstanding principal amount as of the Reference Date, the applicable interest rate and the modalities and final repayment date, as well as a description of any Liens granted by any Group Company to secure such Indebtedness or any Guarantees granted by any Group Company or any other Person in connection with such Indebtedness.

(b) **Schedule 8.2.4(b)** (*Existing Indebtedness under which any Group Company is a creditor*) provides a true and complete description of all existing Indebtedness under which any Group Company is a creditor, except for usual terms of payments granted to their customers.

(c) Since the Reference Date, none of the Group Companies has agreed to cancel any debt (*abandon de créances*) or has benefited from a cancellation of debt, which contains a provision for repayment in the event that such Group Company's financial situation improves (*clause de retour à meilleure fortune*).

(d) **Schedule 8.2.4(d)** (*Bank accounts and safes of the Group Companies and related delegation of powers*) provides a true and complete list of the credit institutions with which the Group Companies have a bank account or a safe, together with the account numbers, the names of the Persons having access to said accounts and safes and being authorized to perform transactions involving said accounts safes and the balance of said accounts and safes.

(e) **Schedule 8.2.4(e)** (*Other delegation of powers granted by the Group Companies*) provides a true and complete list of all delegation of powers granted by the Group Companies for purposes other than the operation of the bank accounts and safes referred to in Subsection (d) above, with details of the powers granted and a description of the functions held by the beneficiaries of such delegation.

(f) There is no obligation pending or that may arise pursuant to any earn-out or similar mechanism to which any Group Company was or is a party in any capacity. No liability may arise for any Group Company pursuant to any earn-out or similar mechanism, whether or not as a consequence of the execution or performance of the obligations under this Agreement.

(g) None of the Group Companies has performed any action nor failed or omitted to perform any action or take any measures that could give rise to a decrease of the assets or an additional liability of a Group Company not specifically recorded in the Accounts.

(h) There is no hedging contract or similar arrangements.

8.2.5Off Balance Sheet Arrangements

(a) Except as set out in **Schedule 8.2.5(a)** (*Off balance sheet arrangements of the Group Companies*), none of the Group Companies has any off balance sheet arrangements (*engagements hors-bilan*), and, in particular, none of them has:

(i) granted any Guarantees or Liens in favor of any Person;

(ii) entered into any agreement for deferred or conditional payments (other than agreements entered into in the ordinary course of business) including payments pursuant to warranties given in connection with the acquisition or transfer of any Securities or other assets;

(iii) entered into any agreement with respect to pensions, additional retirement payments (*compléments de retraite*) and similar indemnities to the benefit of their current or former employees or Managers;

(iv) participated in any transactions relating to the carrying of Securities, interest rate or exchange rate swap agreements or entered into any arrangements made on a future market; or

(v) entered into any financial leases.

(b) Subject to the exceptions stated in **Schedule 8.2.5(a)**, the off balance sheet arrangements identified in **Schedule 8.2.5(a)** have been entered into by the Group Companies in the ordinary course of business on an arm's length basis.

(c) Except as set out in **Schedule 8.2.5(a)**, upon consummation of the Transaction, none of the Group Companies will be a party to any agreement that restricts its capability to grant any Liens over its assets or any other Guarantee.

8.2.6Receivables

(a) All receivables of the Group Companies reflected in the Accounts have been and/or will have been generated in the ordinary course of business, as the case may be.

(b) **Schedule 8.2.6(b)** (*Overdue Receivables*) sets out the list of all receivables of an amount superior to fifty thousand Euros (€50,000) and the corresponding provisions recorded in the Accounts, and which, as of the date hereof, have not been paid within a period of 180 days as from the date on which they became due and payable, it being specified that it will be updated as of the Closing Date in order to reflect all receivables of an amount superior to fifty thousand Euros (€50,000) net of the corresponding provisions, as recorded in the Accounts, which, as of the Closing Date, have not been paid within a period of 180 days as from the date on which they became due and payable (the "**Overdue Receivables**").

(c) To the Sellers' Knowledge, the receivables, other than the Overdue Receivables, are fully recoverable within the terms of payment of the agreements from which they respectively arise. All such receivables other than the Overdue Receivables shall be paid pursuant to the terms and conditions of the agreements from which they respectively arise, in full, for an amount at least equal to their face value, net of the corresponding reserves for doubtful debt, if any, recorded in the Accounts, in accordance with French GAAP.

(d) Except as set out in **Schedule 8.2.6(d)** (*Assigned, securitized, discounted or otherwise transferred receivables of the Group Companies*), none of the receivables of an amount superior to fifty thousand Euros (€50,000), have been assigned, securitized, discounted or otherwise transferred as a guarantee or are subject to any Liens or any payment delegation.

(e) The receivables existing among Group Companies are accounted for separately as set out in **Schedule 8.2.6(e)** (*Receivables among the Group Companies*).

8.2.7Inventory

The Inventory of each of the Group Companies is in good condition, ordinary wear and tear excepted, of such quality and quantity as reasonably necessary for the conduct by each such Group Companies of their activities in the ordinary course of business consistent with past practices. The Inventory of each Group Company is composed of goods that can be used by such Group Company for their intended purposes or sold by such Group Company in the ordinary course of business. Each Group Company has valid and marketable title to its Inventory, free and clear of any Liens.

8.2.8Personal Property

(a) **Schedule 8.2.8(a)** (*Owned Personal Property*) provides a true and complete list of all movable property, installation, items of machinery, vehicles and equipment owned by each Group Company, with a net accounting value exceeding fifty thousand Euros (€50,000) per asset (the "**Owned Personal Property**").

(b) The Owned Personal Property of the Group Companies is fully and validly owned by the Group Companies (except for those that are subject to a retention of title clause (*clause de réserve de propriété*)), free and clear of any Liens.

(c) **Schedule 8.2.8(c)** (*Agreements relating to the Leased Personal Property*) provides a true and complete copy of all agreements relating to the lease, leasing or use of any leased movable property, installation, items of machinery, vehicles and equipment (the "**Leased Personal Property**") to which a Group Company (whether as a lessee or sub lessee) is a party, with a net accounting value exceeding fifty thousand Euros (€50,000) per Leased Personal Property.

(d) All Owned Personal Property and Leased Personal Property are in a good operating condition and normal state of maintenance and repair, ordinary wear and tear excepted, and suitable for their intended purposes in compliance with applicable Laws.

(e) The Group Companies' businesses (*fonds de commerce*) have been regularly and properly operated, in compliance with applicable Laws, so as to maintain their activities and safeguard their existence. The Group Companies have full and valid ownership over such businesses, and except as set forth in **Schedule 8.2.8(e)** (*Liens on businesses of the Group Companies*), such businesses shall be free and clear of any Liens on the Closing Date, and the Group Companies operate such businesses directly. The ownership titles to such businesses have, to the extent required by applicable Laws, been duly registered with the competent commerce and companies registry (*Registre du commerce et des Sociétés*) or foreign equivalent. Except as set forth in **Schedule 8.2.8(e)**, there are no matters or circumstances likely to restrict the operation or sale of any of such businesses by the Group Companies.

8.2.9Real Property

(a) No real property is owned by any of the Group Companies. None of the Group Companies has entered into any agreement to acquire neither any real property nor any rights to use, occupy or lease any real property other than the Real Property.

(b) **Schedule 8.2.9(b)(1)** (*Real Property Leases*) provides a true and complete copy of all Real Property Leases. Except as set forth in **Schedule 8.2.9(b)(2)**, (*Uncapped Real Property Leases*) none of the Real Property Leases has a duration which, as a result of a renewal by tacit agreement, is equal to or exceeds twelve years. The Real Property Leases provide each Group Company with valid occupational rights on the leased Real Property, as well as, for commercial leases, valid commercial ownership rights (*propriété*

commerciale) and, for financial leases, a valid option to acquire the Real Property upon expiration of the lease.

(c) The Group Companies do not need to own, use or occupy any real property other than the Real Property, in order to conduct their activities as currently conducted by the Sellers. Except as set out in **Schedule 8.2.9(c)** (*Third-parties' rights to the Real Property*), no Person other than the Group Companies has any right to any of the Real Property.

(d) The Group Companies presently occupy and have always occupied the Real Property in compliance with applicable Laws and the terms of the Real Property Leases.

(e) To the Sellers' Knowledge, the utilities and equipment of the premises, including water, electricity, telephone, cable, internet access, required for the use, occupancy and operation of the Real Property leased by the Group Companies pursuant to the Real Property Leases are adequate for the conduct of the activities of the Group Companies as currently conducted. The leased Real Property is suitable for its intended purposes in compliance with applicable Laws. To the Sellers' Knowledge, there are no material latent defects or adverse physical condition affecting the Real Property. Neither the Sellers nor any of the Group Companies have received any notice of a *mise en conformité* or of any similar requirements from any Person to carry out, at the expense of any Group Company, any repairs or improvements on the leased Real Property. All repairs or improvements required to be carried out on the leased Real Property, have been fully reserved for in the Accounts.

(f) Each Group Company is in peaceful possession of its leased Real Property and has received no written notice that there may be zoning regulations, rights-of-way, easements or other contractual or legal restrictions that preclude or restrict the ability of the Group Companies to use the Real Property in the scope and manner as currently conducted.

(g) To the Sellers' Knowledge, there are no circumstances which may result in any liability to a Group Company in connection with any Real Property currently or formerly used or occupied by it.

8.2.10Intellectual Property

(a) **Schedule 8.2.10(a)** (*List of Intellectual Property Rights*) provides a true and complete list of all Intellectual Property Rights owned by each Group Company or otherwise used in its business, including all FB Held Patent Rights, and except, for Software, generally available off-the-shelf software, and Publicly Available Software. Without limiting the foregoing, **Schedule 8.2.10(a)** provides: (i) for each patent and patent application, the patent number or application serial number for each jurisdiction in which the patent or application has been filed, the date filed or granted, and the present status thereof; (ii) for each registered trademark, trade name or service mark, the application serial number or registration number, for each country, province and state, and the class of goods covered; (iii) for any URL or domain name, the registration date, any renewal date and name of registry; (iv) for each registered mask work, the date of first commercial exploitation, the registration number and date of registration, for each by country, province and state; and (v) for each registered copyrighted work, the number and date of registration for each by country, province and state in which a copyright application has been registered.

(b) When owned by a Group Company, such Intellectual Property Rights or Technology are fully and validly owned by the Group Company concerned, free and clear of any Liens. Except as set out in **Schedule 8.2.10(b)(1)** (*Limitation of the use of the Group Companies' Intellectual Property*), the Sellers and the Group Companies are not bound by, and no Group Companies Intellectual Property or Group Companies Technology is subject to, any agreement or arrangement containing any covenant or other provision that

in any way limits or restricts the ability of any of the Group Companies to use, exploit, assert or enforce any Group Companies Intellectual Property owned by such Group Company or Group Companies Technology held by such Group Company anywhere in the world. To the Sellers' Knowledge and except as set out in **Schedule 8.2.10(a)**, the Group Companies have a valid and enforceable right or license to use any and all other Intellectual Property Rights and Technology not owned by any Group Company and used in the conduct of their businesses, and, except as set out in **Schedule 8.2.10(b)(2)** (*Termination of licensed Intellectual Property Rights*) and except for the termination of the licenses granted to Kepler under the PLA1 Agreement however solely to the extent of the FB Held Patent Rights transferred to Kepler pursuant to the IP Agreement, all such licensed Intellectual Property Rights and rights to use Technology are not terminable and will not cease to be valid and enforceable rights of the Group Companies by reason of the execution, delivery and performance of this Agreement, or the consummation of the transactions contemplated hereby.

(c) In all relevant jurisdictions, the Group Companies and, with respect to the FB Held Patent Rights, to the Sellers' Knowledge, France Brevets, have taken, all actions reasonably necessary to properly file, maintain and protect the Group Companies Intellectual Property, excluding the Abandoned Patents, and performed all other formalities required by applicable Laws in connection with such Group Companies Intellectual Property, including, for the FB Held Patent Rights which are not Abandoned Patents, payment in full and in due time of all applicable registration, renewal and maintenance fees and expenses to the relevant Governmental Authority, filing of applicable statements of use, timely response to office actions and disclosure of any required information, and all assignments (and licenses where required) of the Group Companies Intellectual Property have been duly recorded with the appropriate Governmental Authorities. The lists of all material actions that must be taken within 90 days of the Closing Date with respect to any of the Registered IP referred to in Section 4.3(a)(xvii) above are true and complete as of the Closing Date. Without limiting the foregoing, the Group Companies and, to the Sellers' Knowledge, France Brevets, have taken all actions reasonably necessary to develop, maintain and protect the FB Held Patent Rights, including without limitation ensuring that the number of Patent Families in the FB Held Patent Rights was in no event and at any time less than twenty-eight (28), and that the FB Held Patent Rights which are not Abandoned Patents are not expired, cancelled, or abandoned.

(d) **Schedule 8.2.10(d)** (*License Agreements*) provides:

(i) a true and complete list of all licenses, sublicenses, and other Contracts under which any of the Group Companies is granted rights in any third-party Technology or Intellectual Property Rights (excluding any Publicly Available Software) (i) embedded or incorporated into or distributed with any Group Companies Product, (ii) used by any of the Group Companies in the development or support of any Group Companies Product, or (iii) used or held for use by any of the Group Companies for any other purpose (excluding, for purposes of clause (iii) only, any generally available, off-the-shelf Software licensed by any of the Group Companies on standard terms);

(ii) a summary of any of the Group Companies' remaining payment and accounting obligations, if any, with respect to each of the licences, sublicences and Contracts listed on **Schedule 8.2.10(d)**, excluding agreements for generally available, off-the-shelf Software licensed by any of the Group Companies on standard terms;

(iii) a true and complete list of all licenses, sublicenses or other agreements under which any of the Group Companies or, with respect to the FB Held Patent Rights, France Brevets or any of France Brevets Affiliates, has granted rights, licenses or interests in the Group Companies Intellectual Property or Group Companies Technology to others except for the licenses granted to customers for the use of Products. Without limiting the foregoing, **Schedule 8.2.10(d)** provides a true and

complete list of all licenses, sublicenses, or other agreements under which any of the Group Companies has granted rights, licenses or interests in the FB Held Patent Rights and/or the Thomson Trademark.

(e) **Schedule 8.2.10(e)** (*Source Code Agreements*) provides a true and complete list of (A) all agreements pursuant to which any of the Group Companies has provided Source Code owned by the Group Companies or detailed design documentation of any Group Companies Product or any material part thereof owned by the Group Companies to a third party, and (B) all third parties to whom any of the Group Companies has granted a contingent right to receive the Source Code of any Group Companies Product or any material part thereof, or contingent right to manufacture the Group Companies Products and Services, whether pursuant to an escrow arrangement or otherwise. Except as set out in **Schedule 8.2.10(e)**, none of the Group Companies has directly or indirectly granted any rights, licenses or interests in the Source Code of its Software, or has provided or disclosed the Source Code to any third party. **Schedule 8.2.10(e)** provides a complete and accurate list of all Source Code deposited by any of the Group Companies at the *Agence de Protection des Programmes* or any other escrow agency, and these deposits have been duly updated for each new major version of the software of said Source Code.

(f) **Schedule 8.2.10(f)** (*Products and Services*) provides a true and complete list of all Group Companies Products and Services as of the date hereof.

(g) The Group Companies do not need any Intellectual Property Rights or Technology other than those identified in **Schedule 8.2.10(a)** in order to conduct their businesses as conducted until now, including the design, manufacture, license and sale of all Group Companies Products and Services. Except as set out in **Schedule 8.2.10(d)**, no Person other than the Group Companies has any right to any such Intellectual Property Rights.

(h) The Group Companies have taken reasonable steps consistent with industry standard practices to safeguard and maintain the secrecy, confidentiality, and value of all trade secrets and confidential information that are material to their businesses. None of the Group Companies has disclosed any of their confidential information to any other Person except where a legally binding, fully enforceable, confidentiality agreement in respect of such disclosure is in place. Without limiting the foregoing, (i) Intellectual Property Rights owned or used by the Group Companies have been kept strictly confidential where such confidentiality was required to maintain their value, (ii) there has been, to the Sellers' Knowledge, no misappropriation of any trade secrets or other confidential Intellectual Property Rights or Technology used in connection with the businesses of the Group Companies by any Person; (iii) to the Sellers' Knowledge, no employee, independent contractor or agent of any of the Group Companies has misappropriated any trade secrets of any other Person in the course of performance as an employee, independent contractor or agent of the businesses of the Group Companies; and (iv) neither the Group Companies, nor any employee, independent contractor or agent of any of the Group Companies is in default or breach of any term of any employment agreement, nondisclosure agreement, assignment of invention agreement or similar agreement, or contract relating in any way to the protection, ownership, development, use or transfer of the Group Companies Intellectual Property or Group Companies Technology.

(i) Except as set out in **Schedule 8.2.10(i)** (*Third Parties and Employees IP Rights*), all third parties (such as, without limitation, consultants) and employees having contributed since May 1, 2011 to the discovery or development of any of the Group Companies Intellectual Property and Group Companies Technology, including third parties and employees having participated in the inventions protected by the Group Companies Intellectual Property, did so either within the scope of his/her employment as part of his/her "*mission inventive*", or pursuant to a written consultancy agreement such that, subject to and in accordance

with applicable Laws and/or pursuant to such consultancy agreement, all Intellectual Property Rights arising therefrom and to the extent thereof became the sole and exclusive property of the Company. Except as set out in **Schedule 8.2.10(i)**, no employee or former employee of any of the Group Companies is entitled under any contractual provision or under any applicable Law to validly claim any right over an Intellectual Property Right resulting from an invention or a creation performed within his/her professional activities. No outstanding amount is currently owned by any of the Group Companies in relation to such work under any contractual provision, and all third parties and employees having participated in the inventions protected by Group Companies Intellectual Property have been appropriately compensated in accordance with applicable Laws and the applicable Collective Agreements.

(j) Except as set forth in **Schedule 8.2.10 (j)** (*Intellectual Property Claims*), there are no pending or, to the Sellers' Knowledge, threatened in writing claim, action, dispute, or Proceedings against any of the Group Companies, any of their employees, or, with respect to the FB Held Patent Rights, to the Sellers' Knowledge, France Brevets, (i) alleging infringement, misappropriation or any other violation of any Intellectual Property Rights of any Person by any of the Group Companies or any of their respective products or services, or (ii) challenging the scope, ownership, validity, or enforceability of any of the Group Companies Intellectual Property or of any of the Group Companies' rights under or to the Intellectual Property Rights and Technology licensed to the concerned Group Company and used in or necessary for the conduct of its business as presently conducted. Without limiting the foregoing, no interference, opposition, reexamination, *inter-partes* review, *post-grant* review, or other Proceeding initiated by a third party is or has been pending in which the scope, validity, or enforceability of any of the Group Companies Intellectual Property is being or has been challenged. None of the Group Companies Intellectual Property has been found invalid or unenforceable in whole or in part. Neither the Group Companies Intellectual Property nor the Group Companies Technology is subject to any outstanding judgment, decree, order, writ, award, injunction or determination of an arbitrator or a Governmental Authority (other than office actions and correspondence regarding pending patent applications and trademark applications) restricting the rights of any of the Group Companies with respect thereto or, with respect to the FB Held Patent Rights, restricting the rights of France Brevets. To the Sellers' Knowledge, the use of Group Companies Intellectual Property or Group Companies Technology by any of the Group Companies does not infringe upon or misappropriate, breach or otherwise conflict with the Intellectual Property Rights or Technology of any third party, including by way of counterfeit or unfair competition. Neither the Sellers nor any of the Group Companies has received any notice alleging any such infringement or misappropriation.

(k) Except as set out in **Schedule 8.2.10(k)** (*Publicly Available Software*), no Group Companies Product (including any Group Companies Product currently under development) contains any Publicly Available Software. All Publicly Available Software used by any of the Group Companies has been used by the Group Companies in its entirety and without modification. The Group Companies have taken all reasonable steps consistent with industry standard practices to avoid incorporation in a Group Companies Product, or otherwise use of, Publicly Available Software in a manner that would require, or condition the use, distribution or otherwise making commercially available of any Group Companies Product on (x) the disclosure, licensing or distribution of any other Software combined, distributed or otherwise made commercially available with such Publicly Available Software in Source Code form, or (y) the licensing or otherwise making available such Publicly Available Software and/or of other Software combined, distributed or otherwise made commercially available with such Publicly Available Software, or any associated Intellectual Property Rights, on a royalty free basis.

(l) None of the Group Companies Products contains any Harmful Code, and the Group Companies have used commercially reasonable efforts to prevent the introduction of such Harmful Code to all Software that is incorporated in or provided with the Group Companies Products and Services.

(m) No funding, facilities, or personnel of any Governmental Authority or educational institution were, since May 1, 2011, used, directly or indirectly, to develop or create, in whole or in part, any of the Group Companies Intellectual Property, the Group Companies Technology, or the Group Companies Products and Services.

(n) Except as set out in **Schedule 8.2.10(n)** (*Standard Essential Patent Declarations*), none of the Sellers, the Group Companies, and to the Sellers' Knowledge, France Brevets or France Brevets Affiliates, has made any written submission to, and is subject to any agreement with, any standards bodies or other entities that would obligate the Sellers or the Group Companies, any successor to or assignee of any of the Group Companies, or France Brevets or France Brevets Affiliates, to grant licenses to or otherwise impair its control of the Group Companies Intellectual Property, the Group Companies Technology, or the Group Companies Products and Services.

(o) To the Sellers' Knowledge, the Group Companies Products and Services do not (a) contain any defect or error in design, materials or workmanship that would materially and adversely affect the use, functionality, or performance of such Group Companies Products and Services; or (b) fail to comply with any applicable warranty or other contractual commitment relating to the use, functionality, or performance of such Group Companies Products and Services.

(p) The Sellers and Group Companies have obtained all approvals necessary for exporting the Group Companies Products and Services outside of France in accordance with all applicable Laws, export control, embargo and other regulations, and importing the Group Companies Products and Services into any country in which the Group Companies Products and Services are now sold or licensed for use, and all such export and import approvals in France and throughout the world are valid, current, outstanding and in full force and effect.

(q) On the date hereof, to the Sellers' Knowledge, France Brevets owns all right, title, and interest in and to the FB Held Patent Rights, including without limitation all rights, title and interest in the FB Held Patent Rights to sue for infringement thereof. To the Sellers' Knowledge, France Brevets has not created any Liens or Encumbrances on the FB Held Patent Rights since it entered into the PLA1 Agreement. With respect to FB Held Patent Rights, France Brevets and France Brevets Affiliates are not bound by, and no FB Held Patent Rights is subject to, any agreement or arrangement containing any covenant or other provision that in any way limits or restricts the ability of France Brevets or France Brevets Affiliates to use, exploit, assert or enforce any FB Held Patent Rights anywhere in the world. Without limiting the foregoing, neither Kepler nor the transferee(s) of the FB Held Patent Rights pursuant to the IP Agreement will be subject to a covenant or any other provision that in any way limits or restricts its ability to use, exploit, assert or enforce any FB Held Patent Rights anywhere in the world as a result of the IP Agreement, or any transaction entered into by France Brevets related to the FB Held Patent Rights.

(r) No Person has interfered with, infringed upon or misappropriated any of Group Companies Intellectual Property or Group Companies Technology, or is currently doing so, and the Group Companies have taken all necessary steps to protect the Intellectual Property Rights they own or use against any such infringements. There is no current or threatened in writing claim, dispute, or Proceedings against any third party relating to the infringement or other violation of the Group Companies Intellectual Property or Group Companies Technology by third parties. With respect to FB Held Patent Rights, France Brevets or any of France Brevets Affiliates has not put a third party on notice of actual or potential infringement

of any of the FB Held Patent Rights or initiated enforcement actions with respect to any of the FB Held Patent Rights.

(s) On the Closing Date, (i) all operations and transactions relating to the implementation and full completion of the IP Recovery will have been validly completed, in accordance with all applicable Laws and with this Agreement, and (ii) France Brevets and France Brevets Affiliates will cease to have any right, title and interest in and to FB Held Patent Rights, including any Abandoned Patents in the FB Held Patent Rights.

(t) There shall be no additional consideration for the license granted by Thomson Licensing SAS (383 461 191 RCS Nanterre) under the Patent Cross-License Agreement entered into on May 3, 2011 by and between Kepler and Thomson Licensing (the "**PCLA**"), of any nature whatsoever, whether for the past, or for the future as a result of the completion of the Transaction, including but not limited to, the acquisition of the control of the Target Companies by the Mother Company, claimed by Thomson Licensing within a period of one (1) year from the date of execution of the Put Option Agreement, nor further to any sales audit conducted by or for the account of Thomson Licensing pursuant to the PCLA during such one (1)-year period (the "**Specific Thomson Licensing Occurrence**"). Notwithstanding anything to the contrary in this Agreement, the Sellers shall indemnify and hold harmless the Purchaser, on a "euro" for "euro" basis (without application of any multiple or formula), from any Loss incurred by the Purchaser or any of the Group Companies in connection with any Specific Thomson Licensing Occurrence, subject only to a specific deductible (*franchise*) of one million Euros (€1,000,000) (the "**Specific Thomson Licensing Indemnity**"), unless, but only to the extent that, any such Loss is due to, or increased by (in which case the Specific Thomson Licensing Indemnity shall be due and be reduced to the extent of such increase), any external growth transaction other than the Transaction completed by any means whatsoever by any entity of the group controlled by the Mother Company (including, after Closing, any Target Company) within a one (1)-year period from the date of execution of the Put Option Agreement. Each Party undertakes not to make any contact, of any nature whatsoever, with Thomson Licensing aiming at, or being reasonably expected to result in, a Specific Thomson Licensing Occurrence, without involving the Purchaser (if the contacting Party is a Seller) or the Sellers' Representative (if the contacting Party is the Purchaser).

8.2.11Information Technology - Data Protection

(a) All records and all data and information of the Group Companies are recorded, stored, maintained or operated or otherwise held exclusively by the Group Companies or by service providers retained by the Group Companies pursuant to Contracts, a list of which is provided in **Schedule 8.2.11(a)** (*Data Storage*).

(b) The Group Companies fully comply with the requirements of all applicable Laws concerning rights in respect of privacy and personal data. The personal data of third parties processed by the Group Companies and/or transferred to the Purchaser has been lawfully obtained and/or otherwise processed pursuant to applicable data privacy and protection Laws and the Purchaser, the Group Companies and their Affiliates will, as of the Closing Date, be entitled to use the same and grant such rights therein towards its customers and business partners in the manner practiced by the Group Companies in the past.

(c) There are no compliance measures by data protection authorities pending against any of the Group Companies which could have an impact on the Group Companies and no such compliance measures have been taken during the preceding three (3) years.

(d) The Group Companies have valid support agreements with the suppliers of the information technology systems, pertaining to the Group Companies, under which preventative and corrective maintenance

services, software upgrades and help desk services for the information technology systems are provided to the Group Companies.

(e) The computer hardware, Software and data used by the Group Companies can be replaced or substituted without material disruption to the business of the Group Companies. In the three (3) years prior to the date of the Agreement, there have been no computer software interruptions which have had a material effect on the business of any Group Company.

(f) The Group Companies have adequate procedures to ensure internal and external security of the computer hardware, computer software and data, including procedures for preventing unauthorized access, preventing the introduction of a virus and taking and storing on-site or off-site back-up copies of the computer software and data.

8.2.12Agreements

(a) All agreements entered into by any of the Group Companies after December 31, 2010 (a "**Group Companies Agreement**" or collectively, the "**Group Companies Agreements**") are valid and in full force and effect, except for those Group Companies Agreements that are terminated, enforceable in accordance with their terms and conditions and in compliance with applicable Laws. The Group Companies have always complied with all their obligations under the Group Companies Agreements.

(b) **Schedule 8.2.12(b)** (*Material Contracts*) sets out a true and complete list of all Material Contracts. **Schedule 8.2.12(b)** specifies for each Material Contract the name of the concerned Group Company, the registration number in the Group Companies' ERP, the date of registration in the Group Companies' ERP, the name of the customer, the revenues recognized as of the Reference Date and the currency.

(c) All Material Contracts are valid and in full force and effect, enforceable in accordance with their terms and conditions and in compliance with applicable Laws. The Group Companies have always complied with all their obligations under the Material Contracts. None of the Group Companies have waived any right under any Material Contract.

(d) Except as set out in **Schedule 8.2.12(d)** (*Affected rights and obligations under Group Companies Agreements and Material Contracts*), there are no circumstances (including as a result of the Transaction) which would:

(i) challenge or reduce any rights of any Group Company under any Group Companies Agreement or Material Contract or increase any of its obligations thereunder;

(ii) constitute a breach or default under any such Group Companies Agreement or Material Contract;

(iii) result in, or authorize, the voidance, termination, suspension, acceleration of any payment, payment of late-payment interest, penalties or indemnities of any kind under any such Group Companies Agreement or Material Contract; or

(iv) otherwise affect the performance or renewal of any such Group Companies Agreement or Material Contract.

(e) Except as set out in **Schedule 8.2.12(e)** (*Specific Contracts*), there are no agreements (including any Group Companies Agreement or Material Contract) or any commitment whatsoever to enter into an agreement having one or more of the following characteristics:

(i) the termination of which would result in a Material Adverse Change; or

(ii) requiring performance after December 31, 2016; or

(iii) the termination by the Group Companies of which is subject to (a) prior notice equal to or longer than six (6) months and/or (b) payment by the Group Companies of a contractual penalty or indemnity of any nature whatsoever in excess of fifty thousand Euros (€50,000) (VAT included); or

(iv) involving a payment or a series of payments by the Group Companies in excess of fifty thousand Euros (€50,000) (VAT included) in the aggregate until December 31, 2016; or

(v) entered into with any Governmental Authority; or

(vi) relating to the granting of subsidies or other financial assistance to any of the Group Companies; or

(vii) containing a change of control, acceleration or similar provision that would be triggered by the completion of Transaction or under which the rights and/or obligations of any Group Company may be adversely affected by the completion of the Transaction; or

(viii) limiting the freedom of a Group Company to develop technology, to do business or to compete, or prohibiting or restricting the conduct of certain activities or pursuant to which a Group Company confers or is granted with an exclusivity; or

(ix) entered into under conditions other than at arm's length, involving obligations, restrictions or expenditures of an unusual, onerous or exceptional nature of an amount in excess of fifty thousand Euros (€50,000) (VAT included) for the Group Companies other than in the ordinary and usual course of business; or

(x) involving agency or distributorship, involving partnership, joint venture, consortium, joint development, shareholders or similar arrangements; or

(xi) being loss making except, as to commercial agreements, for losses provided or recorded in the Accounts; or

(xii) being to result in unlimited liability or joint and several liability of any Group Company; or explicitly providing for contractual penalties or liquidated damages of an amount in excess of fifty thousand Euros (€50,000) (VAT included); or

(xiii) having liability or litigation risk for an amount in excess of fifty thousand Euros (€50,000) (VAT included); or

(xiv) having the effect or purpose of sharing profits or revenues with third parties or the payment of commission or other remuneration calculated by reference to profit or turnover, which may result

in a payment by the Group Companies of more than fifty thousand Euros (€50,000) (VAT included); or

(xv) having no volume discount clauses, where any Group Company is the customer, or having volume discount clauses, where any Group Company is the supplier, or having most favored customer clauses.

(f) All arrangements with employees/ customers/ third parties are in writing and there has not been any verbal commitment of any kind to any party.

8.2.13Commercial Relations

(a) **Schedule 8.2.13(a)** (*Largest Suppliers and Customers*) provides a true and complete list of (i) the ten (10) largest suppliers of the Group Companies taken as a whole in terms of purchase on the basis of the Accounts, and (ii) of the twenty (20) largest customers of the Group Companies taken as a whole in terms of sales on the basis of the Accounts and with an aggregate value for each customer superior to five hundred and forty-five thousand Euros (€545,000).

(b) There are no agreements that may oblige any Group Company, whether immediately or in the future, to accept imposed purchase prices to which such Group Company has not previously agreed to.

(c) Except as indicated in **Schedule 8.2.13(c)** (*Modifications of the commercial relations*), none of the Sellers or the Group Companies has been informed in writing that any customer or supplier of any Group Company has decided or intends to cease, reduce or otherwise adversely modify, whether immediately or in the future, its commercial relationship with any Group Company for any reason other than in the ordinary course of business.

(d) Except as indicated in **Schedule 8.2.13(d)** (*Events impacting the Group Companies' supplies*), to the Sellers' Knowledge, there are no events or circumstances other than those arising from the general economic situation that may endanger the Group Companies' supplies or outlets, or the conditions applicable thereto.

(e) Neither any of the Sellers nor its Affiliates is engaged, directly or indirectly, in the businesses of the Group Companies other than through the Group Companies.

8.2.14Sales Representatives Independent Contractors

(a) **Schedule 8.2.14(a)** (*List and description of the Group Companies' sales support activities agreements*) provides a true and complete list of all the Group Companies' sales support activities agreements entered into by and between (i) any Group Company and (ii) sales representatives independent contractors or sales support providers (the Persons listed in (ii) hereinabove, the "**Sales Representatives Independent Contractors**"), together with reasonable detail on the main terms of said sales support activities agreements (including duration, territory, products concerned, rate of commission).

(b) No commercial agency agreement has been entered into by any of the Group Companies.

(c) Any amounts superior to fifty thousand Euros (€50,000) owed to Sales Representatives Independent Contractors have been duly paid in time by the Group Companies or are fully reserved for in the Accounts and the Group Companies have no outstanding liabilities superior to fifty thousand Euros (€50,000) towards any current or former Sales Representatives Independent Contractors, including those resulting

from the termination or breach of its agreement. There are no Proceedings pending or, to the Sellers' Knowledge, threatened in writing involving the Group Companies and any of their former or current Sales Representatives Independent Contractors.

(d) No employment agreement has been entered into by any Group Company with current or former Sales Representatives Independent Contractors and none of the Group Companies have granted any loans or other financial assistance to their Sales Representatives Independent Contractors.

(e) There are no individuals and companies working as independent contractors for any of the Group Companies other than the Sales Representatives Independent Contractors.

8.2.15Insurance Policies

(a) **Schedule 8.2.15(a)** (*Insurance Policies*) provides a true and complete list of the insurance policies maintained by the Group Companies or to which any Group Company is a named insured or otherwise the beneficiary of the coverage which will be available on and after the Closing Date (the "**Insurance Policies**"). **Schedule 8.2.15(a)** specifies for each Insurance Policy the name of the insurance company, the policy number, a description of the scope, nature and amount of the risk covered, the duration of the policy, the annual premium amount and the amount of the deductible, if any.

(b) All Insurance Policies are valid and in full force and effect. Unless modified by the Purchaser, the Insurance Policies which will be available after the Closing Date will remain valid and in full force for any incident covered by Insurance Policies with a cause or origin in an event which occurred prior to the Closing Date, whether known or unknown at such date.

(c) Each Group Company benefits from insurance coverage with solvent insurance companies that are in scope and amount customary and reasonable for the businesses in which it has been or is engaged, in accordance with past practices and the businesses of the Group Companies as conducted until now. Each Group Company is validly insured for all material risks which may result from the conduct of its activities, including without limitation, for the acts of its Managers or employees and in respect of those risks relating to the possession or use of assets which it owns or uses (including loss of earnings, exceptional loss or liability).

(d) All premiums due with respect to such Insurance Policies have been paid on time and the Group Companies have made the adequate reserves for the amount of such premiums in the Accounts.

(e) The Group Companies have not breached any material provisions of the Insurance Policies and have properly declared any incident which might give rise to an indemnification under any of the Insurance Policies.

(f) There is no outstanding claim under any such Insurance Policies. The Group Companies have not suffered any damages nor know of any fact that might give rise to an increase of any insurance premium or deductible as currently applied under the Insurance Policies. **Schedule 8.2.15(f)** (*Insurance Claims*) further sets out the incidents in respect of which any Group Company has made claims under the Insurance Policies for the last three (3) years together with the amount of payments made under such Insurance Policies in respect thereof.

(g) None of the Group Companies has done anything or received any notification and, to the Sellers' Knowledge, there are no circumstances that would result in the termination of any Insurance Policy,

reduce the insurance coverage there under, prevent the renewal of any policy on its existing terms or otherwise modify any Insurance Policy in an adverse manner for the Group Companies.

8.2.16Tax, Social Security and Customs

(a) Except as indicated in **Schedule 8.2.16(a)** (*Exceptions to Tax, Social Security and Customs Declarations*):

(i) the Group Companies have kept all Tax documentation, information, software or hardware required to be kept by applicable Tax Law;

(ii) the Group Companies have timely filed with the appropriate Governmental Authorities any and all Tax Returns that were required to be filed by or on behalf of such Group Company on or before the Closing, and each such Tax Return, was and is complete and correct, including in respect of the amount, existence and possibility to use the Tax losses, Tax credits and carried-back receivables of the Group Companies, it being specified that this possibility to use Tax losses, Tax credits and carried-back receivables is subject to the Group Companies making taxable profits in future tax years and refraining from taking any action in the future leading to the loss of these Tax losses, Tax credits and carried-back receivables;

(iii) the Group Companies have timely paid all Taxes shown to be payable in such Tax Returns; and

(iv) the reserves for accrued Tax liabilities set forth in the Accounts are, in accordance with the French GAAP, adequate to pay all Taxes due in connection with their respective date.

(b) Except as indicated in **Schedule 8.2.16(b)** (*Tax Audits*), none of the Group Companies:

(i) has been nor is the subject of any Tax audit, reassessment or litigation relating any of the financial years ended or ending on December 31, 2012, 2013, 2014 or 2015; and

(ii) has received any request for information from any Tax Authority.

(c) The Group Companies listed in **Schedule 8.2.16(c)** (*Perimeter of Tax Consolidation Regime*) have validly and timely opted for the tax consolidation regime ("*intégration fiscale*") with the Holding as the parent company of the tax consolidated group.

(d) None of the Group Companies is acting as Tax representative for any company other than one of the Group Companies.

(e) None of the Group Companies benefit from any Tax ruling or similar arrangement granted by any Tax Authority.

(f) The transactions carried out by any Group Company with any of the Sellers and any related party of the relevant Group Company (within the meaning of Article 39.12 of the French Tax code) have been carried out at arm's length.

(g) Except as set forth in **Schedule 8.2.16(g)** (*Tax Costs generated by the Performance of this Agreement*), neither the performance by each of the Sellers of its obligations hereunder, nor the consummation of the transactions contemplated herein (including the pre-Closing transactions described in Section 5), will generate any Tax cost for any of the Group Companies.

(h) The "CIR" and "CICE" Tax credit receivables recorded in the individual corporate Accounts of the relevant Group Companies are valid, fully recoverable and will not be successfully challenged by any Governmental Authority or Tax Authority.

8.2.17Labor Matters

(a) **Schedule 8.2.17(a)** (*List of the Employees of the Companies*) provides a true and complete list of (i) all individuals employed by the Group Companies and indicates for each of them, their duties, term of office, seniority and a description of their compensation details (including any fringe benefits, pensions, bonuses, incentive schemes, accrued paid holidays and working time related benefits (R.T.T.)).

(b) None of the Managers or Key Employees of the Group Companies has resigned or has informed the Sellers or, to the Sellers' Knowledge, any Group Company of his/her intention to resign in writing. None of them has been dismissed or is subject to a dismissal procedure which is pending.

(c) **Schedule 8.2.17(c)** (*List of the Collective Agreements*) provides a true and complete list of all collective agreements applicable to each Group Company (the "**Collective Agreements**"). Collective Agreements shall include in particular the applicable national collective bargaining (*conventions collectives*) and company agreements (*accords collectifs*) and any agreements established with staff representatives (*accords atypiques*) or with the employees (*referendum*) or description of companies practices (*usages*). In particular, it provides true and complete copies of the following Collective Agreements:

(i) retirement, profit sharing, growth sharing, company savings plans, retirement bonus, stock purchase or stock option plans, or any other similar agreement for the benefit of their respective employees or Managers;

(ii) any document describing the remuneration policy, including premiums, bonuses, commissions, incentive schemes, and advantages in kind, awarded to all of the staff or certain categories thereof or to the Managers;

(iii) any unilateral undertaking or other regional, local, company or business branch practices (*usages*), that provide for advantages exceeding those resulting from applicable Laws or collective bargaining agreements.

(d) All Collective Agreements entered into at any Group Company's level comply with applicable Laws, have been regularly filed, whenever required, are valid and in full force and effect. The Group Companies comply and have complied with and performed their obligations under these Collective Agreements and, to the Sellers' Knowledge, none of the Group Companies has received any notices, claims or litigation from the Governmental Authorities, staff representatives or employees in this respect.

(e) All Group Companies have, in due time, regularly entered into all mandatory collective agreements or action plans.

(f) None of the Group Companies has contracted any pension benefit obligations for any of their employees or Managers.

(g) The Group Companies do not participate in or contribute to any (i) retirement plans; (ii) profit-sharing bonus or other incentive schemes; or (iii) other benefit plans, in all instances, other than those which are compulsory under applicable Laws and Collective Agreements.

(h) Standard forms of employment agreements used by the Group Companies are set out in **Schedule 8.2.17(h)** (*Standard Forms of Employment Contracts*). The terms and conditions of the employment contracts between each Group Company and its employees, as well as the conditions of employment of any employee of the Companies, comply with applicable Laws and the Collective Agreements.

(i) **Schedule 8.2.17(i)** (*Specific Employment Contracts*) provides a true and complete copy of the employment contracts entered into with the Key Employees and with the Managers/company officers of the Group Companies. **Schedule 8.2.17(i)** further provides a table identifying all employees of the Group Companies who benefit from advantages in excess of those arising from applicable Laws or the Collective Agreements such as defined benefit retirement schemes or golden parachutes payments or whose employment contract otherwise differs from the standard form of employment contract set out in **Schedule 8.2.17(h)**.

(j) Except as indicated in **Schedule 8.2.17(j)** (*Extra Notice Period or Indemnity in Employment Contracts*), none of the Group Companies has entered into any Contracts or undertaking with any of its employees or company officers which provide, in the event of termination, for a notice period or payment of an indemnity which exceeds that provided for by applicable Laws and Collective Agreements.

(k) Except for the annual increase subject to conditions decided as of July 1, 2016 amounting to 1% of the employees' gross monthly salary, neither the Sellers nor any Group Companies have undertaken to increase the rates of remuneration or to grant a bonus or advantage of any kind or pay any compensation to any of its employees or Managers as a result of the completion of the Transaction or otherwise after the date hereof, other than as imposed by applicable Laws or by the Collective Agreements.

(l) The Group Companies have no outstanding liabilities or obligations towards their former employees or Managers, including under settlement agreements.

(m) No Group Company has entered into any agreement which could lead to the reclassification of the relationship with any individual as an employment contract with any Group Company or which could be considered as illegal lending or bargaining of employees, in the past three years. None of the Group Companies has received any written notices, claims or litigation from the Governmental Authorities, staff representatives, or employees in this respect, in the past three years.

(n) No Group Company has entered into any subcontracting agreement which could lead to the reclassification of the relationship with any individual as an employment contract with any Group Company or which could be considered as illegal lending or bargaining of employees, in the past three years. None of the Group Companies has received any notices, claims or litigation from the Governmental Authorities, staff representatives, or employees in this respect, in the past three years.

(o) All amounts owing to any Managers or employees of any Group Companies (including under benefit plans or retirement indemnities accrued to the employees) for all periods ending on or prior to the Closing Date will have been timely paid in full or will have been fully reserved for or provided as off-balance sheet commitments in the Closing Accounts. No work accident or any professional disease has occurred that is likely to trigger an increase of the insurance rate in any of the Group Companies. There has been no agreement of any kind such as would increase the rates of social contributions. In particular, no work

related accident insurance increase (*taux majoré de cotisation d'accident du travail*) has been applied or is likely to be applied to any of the Group Companies.

(p) Except as set forth in **Schedule 8.2.17(p)** (*Compliance with labor Laws*), the Group Companies are and have been in compliance with all applicable Laws relating to labor and social security matters and none of the Group Companies has received any notices, claims or litigation from the Governmental Authorities, staff representatives, or employees in this respect, in the past three years. In that respect, the Seller has duly informed and consulted the existing works' council, in connection with the entering into of this Agreement and the transactions provided for herein and said works' council has accordingly issued an opinion in compliance with applicable Laws.

(q) All of the Group Companies have taken any and all necessary actions under applicable Laws related to working time related benefits (R.T.T.) and holiday pays and have paid all amounts due to any employees in accordance with applicable Laws and none of the Group Companies has received any notices, claims or litigation from the Governmental Authorities, staff representatives, or employees in this respect, in the past three years. All related costs or expenses are adequately provided in the Accounts and/or the Closing Accounts, as appropriate.

(r) There are no pending or, to the Sellers' Knowledge, threatened in writing Proceedings instituted by the Labor Administration (*Inspection du Travail ou DIRECCTE*), the Social Security Administration (*URSSAF*) or any Governmental Authority competent for applicable labor Laws, union or employees' representatives, a current or former employee nor involving any Group Company and any of its present or former employees or Managers for a stated amount greater than ten thousand Euros (€10,000). No union or staff representative has expressed during meetings with Management or through leaflets any threat of claim against any Group Company.

(s) None of the Group Companies has made any undertakings, including undertakings to maintain or to terminate any employments agreements, within the context of any redundancy plan (*plan de sauvegarde de l'emploi,* or former *plan social*), an unemployment plan that has not been performed in full or fully reserved for in the Accounts and/or the Closing Accounts, as appropriate. None of the Group Companies incurs any liability towards any of its employees or Managers or any former employees or Managers nor is liable to make any payment to any of them including by way of damages.

(t) There is no pending or, to the Sellers' Knowledge, threatened in writing labor strike, work stoppage or other organized disturbance or disruption of the labor force of any of the Group Companies. **Schedule 8.2.17(t)** (*Description of Previous Strikes or Labor Conflicts*) identifies in reasonable details any such event that has occurred in the past three years.

8.2.18Environment

(a) To the Sellers' Knowledge, there are no circumstances that could be expected to result in liabilities of any Group Company arising under or relating to environmental protection or Environmental Laws.

(b) No hazardous substances (such as asbestos) prohibited or regulated by any Environmental Laws or Governmental Authority exists or, to the Sellers' Knowledge, have ever existed on any Real Property owned or occupied by any of the Group Companies (whether in the buildings or on the ground or underground) and no hazardous wastes of any kind are or, to the Sellers' Knowledge, have been stored or otherwise released on or from any such Real Property.

(c) **<u>Schedule 8.2.18(c)</u>** (*List of Environmental Reports*) provides a true and complete copy of all environmental reports issued by or on behalf of the Group Companies or which relate directly or indirectly to the activities of any Group Company. The cost of compliance by all Group Companies with Environmental Laws, with the provisions of the corresponding Governmental Authorizations or with the recommendations contained in any such environmental reports, is sufficiently provided for in the Accounts.

(d) All Group Companies have at all times in the past sold, transferred, transported or arranged for the transportation, treated for elimination or arranged for the treatment or elimination of hazardous substances or wastes in compliance with the Environmental Laws.

8.2.19Litigation

(a) Except as set forth in **<u>Schedule 8.2.19(a)</u>** (*Pending or foreseen Proceedings*), there are no Proceedings of any kind, currently pending or, to the Sellers' Knowledge, possibly foreseen, involving any Group Company or to which any Group Company is a party.

(b) No administrative, judicial or arbitration decisions have been rendered against any Group Company that may result in a Material Adverse Change.

(c) None of the Group Companies are or have been subject to any Proceedings which could prevent or delay the consummation or modify the terms of the Transaction.

(d) No matter exists which may give rise to the criminal liability of any Group Company and/or any of its Managers resulting in a Loss.

8.2.20Products and Services Liability

(a) There is no pending or, to the Sellers' Knowledge, threatened in writing Proceedings against any Group Company relating to the quality of the products or services sold, manufactured, delivered or performed by sub-contractors of any of the Group Companies (the "**Products and Services**"). To the Sellers' Knowledge, none of the Group Companies may incur any liability as a result of the sale, manufacture, delivery or performance of the Products and Services.

(b) None of the Products and Services has any hidden or apparent faults or defects for which the customers can claim any damages under the relevant agreements. The Products and Services conform to applicable Laws, contractual commitments, standards and norms (including safety standards) applicable to them.

(c) Except as set forth in **<u>Schedule 8.2.20(c)</u>** (*Warranty granted with respect to the Products and Services),* no warranty has been granted with respect to the Products and Services pursuant to which the Group Companies would be liable beyond the limits and periods provided for by the general conditions of sale provided by the contractual documentation applicable to such Products and Services and set out in **<u>Schedule 8.2.20(c)</u>**.

8.2.21Compliance with Laws

(a) All Governmental Authorizations required for the Group Companies to conduct their activities and own, build, operate or use their assets, as now being conducted or owned, built, operated or used, have been obtained in compliance with applicable Laws and are in full force and effect. **<u>Schedule 8.2.21(a)</u>** (*Governmental Authorizations*) provides a true and complete list of all such Governmental Authorizations.

(b) Each Group Company has conducted its activities and owned, built, operated or used its assets in compliance with all applicable Laws. To the Sellers' Knowledge, there are no circumstances that may result in the withdrawal, suspension, non-renewal or modification of any Governmental Authorizations referred to in Paragraph (a) above.

(c) Neither the Sellers nor, to the Sellers' Knowledge, the Group Companies favored by any means a deceitful justification of the origin of the assets or income of any offence's perpetrator (*auteur d'un crime ou d'un délit*) whose offence provided such perpetrator a direct or indirect benefit, nor helped a transaction aiming at the investment, concealment or conversion of the direct or indirect benefit of any offence.

8.2.22Relations with the Sellers

(a) Upon the Closing Date, neither the Sellers, nor any Affiliate of the Sellers, save for in respect of (i) the employment contracts entered into with any Group Company and/or (ii) the corporate mandates and offices exercised within any Group Company, which will remain in force notwithstanding Closing:

(i) will hold, either together or separately, directly or indirectly, in whole or in part, any property, assets or rights whatsoever that any Group Company needs to own, use, exercise or benefit from for purposes of carrying out all or part of its activities; or

(ii) will be a creditor or debtor of any Group Company or will be able, whether currently or in the future (on the basis of the relationships existing on or prior to the Closing Date), to exercise any claim or right against any Group Company or owe any obligation to any of them; or

(iii) will have granted any Guarantee to secure any Group Company's undertakings, or is the beneficiary of any Guarantee granted by any Group Company; or

(iv) generally, will have entered into any agreement with any Group Company.

(b) As of the Closing Date, and except as otherwise provided for in this Agreement, there is no agreements or arrangements in force or likely to produce some effects between any of the Group Companies, on the one hand, and any of the Sellers, on the other hand. All the transactions pursuant to such agreements and arrangements have been properly and duly settled and there remain no exposure whatsoever for any of the Group Companies pursuant thereto.

8.2.23No Undisclosed Agreements with Managers and Key Employees

There will at Closing be no in force Contracts, agreements, plans or arrangements of the Sellers or any of their Affiliates or Connected Persons entered into among themselves or with Managers or Key Employees of any of the Group Companies not disclosed herein, including with respect to the allocation among the Sellers of the Final Price, the Estimated Initial Price, the Initial Price Adjustment, the Revenues Adjustment, the Backlog Adjustment and any Refund.

8.2.24Management since the Reference Date

(a) Except as set forth in **Schedule 8.2.24(a)** (*Management of the Group Companies since the Reference Date*), since the Reference Date, the Group Companies have carried on their activities only in the ordinary course of business, with due care and attention as *bon père de famille* (*de façon prudente, diligente et soigneuse*) and in substantially the same manner as theretofore conducted and none of the Group Companies has taken nor committed to take any of the actions set forth in Section 5.9(b) above, except

as may have been (*x*) required by applicable Laws or any Governmental Authority or (*y*) expressly contemplated elsewhere in this Agreement, or (*z*) consented to in writing by the Purchaser in accordance with the provisions of Section 5.9.

(b) Since the Reference Date, no circumstance, event or fact relating to any of the Group Companies has occurred that may constitute a Material Adverse Change.

8.2.25Intermediaries

(a) None of the Group Companies have any liability or obligation to pay any fees or commissions to any broker, finder, agent or advisor, including attorneys and statutory auditors, with respect to any of the transactions contemplated by this Agreement or relating to the Transaction.

(b) All professional fees or any other amounts due by any of the Group Companies to any advisors, including to attorneys and statutory auditors, have been paid and none of these advisors has any claim against such Group Company.

8.2.26Completeness of Representations and Warranties

(a) The Sellers have not omitted to disclose or misstated to the Purchaser during the negotiation of the Transaction any material circumstances, events or facts whatsoever concerning the Group Companies or the Ordinary Shares, the ORAs, the OCRs and the OBSAs, nor the Transferred Securities other than the ManCo Shares.

(b) The Sellers have taken all necessary actions to obtain from the Group Companies all information necessary to enable them to make the representations contained in this Section 8.2.

(c) There is no circumstance, event or fact relating to any of the Group Companies that may constitute a Material Adverse Change that has not been set forth in this Agreement.

8.3Additional Representations by the ManCo Shareholders Individually but not Jointly (*conjointement mais non solidairement*)

The ManCo Shareholders hereby represent and warrant individually and not jointly (*conjointement mais non solidairement*) (but, for the avoidance of doubt, without prejudice to the provisions of Section 11.10, which shall apply), except as set forth or included in the Disclosures Schedules, to the Purchaser, as of the date hereof and as of the Closing Date (except for such representations which are expressly made as of the date hereof or as of the Closing Date and are therefore made on such date only), as set forth below.

8.3.1ManCo

ManCo is a company (*société par actions simplifiée*) duly organized, validly existing and in good standing under the laws of France and has all requisite corporate power and authority to own its assets and conduct its activities as they have been and are now being conducted.

(a) A true, accurate and complete copy of the by-laws and of the certificate of incorporation of ManCo is set out in **Schedule 8.3.1(b)** (*By-laws and Certificate of Incorporation of ManCo*).

(b) ManCo is not nor has been in a state of insolvency (*en état de cessation des paiements*), nor subject to any Bankruptcy Proceedings and no facts exist that would result in any such event occurring. There is no reason which could lead ManCo to incur its nullity or its dissolution (other than voluntary).

(c) Since its incorporation, ManCo exists and operates validly and regularly, in compliance with applicable Laws.

(d) Since its incorporation, ManCo has not carried out any activities other than the management of its cash and of its shareholding in the Holding.

(e) All corporate decisions made by the management bodies of ManCo have always been made in compliance with its by-laws and the applicable Laws, duly recorded in the corporate registers that will be provided to the Purchaser on the Closing Date and all required registration formalities or filings have been performed. The share transfer registers and shareholders' accounts that will be provided to the Purchaser on the Closing Date have been properly and regularly maintained.

8.3.2The ManCo Shares

(a) The ManCo Shares represent 100% of the share capital and voting rights of ManCo.

(b) Except for the ManCo Shares, ManCo has not issued, nor approved the issuance of, any shares, warrants or Securities of any nature whatsoever; and there are no options or other agreements or undertakings pursuant to which ManCo is or may become obligated to issue any shares, warrants or other Securities of any nature whatsoever.

8.3.3ManCo's Accounts

(a) The Accounts of ManCo, as attached as **Schedule 8.3.3(a)** (*Accounts of ManCo*):

(i) have been prepared on a consistent basis in accordance with French GAAP;

(ii) are accurate and complete (*réguliers et sincères*) and present a true and fair view (*donnent une image fidèle*) of the assets, financial condition and results of operations of ManCo, in compliance with the provisions of article L. 123-14 of the French Commercial Code, as of the date and for the periods covered thereby; and

(iii) for the fiscal year ended on December 31, 2014, have been approved at the ordinary general meeting of its shareholders without qualification (*sans réserve*) or modification in accordance with applicable Laws and ManCo's by-laws.

(b) ManCo has no liabilities, of any kind, that are not reflected in the Accounts other than those incurred in the ordinary course of business since the Reference Date. The aggregate amount of all liabilities of ManCo does not exceed €10,000.

(c) ManCo has not granted any security, warranty or other off balance sheet undertakings.

(d) ManCo owns 3,635,755 Ordinary Shares. Except for the 3,635,755 Ordinary Shares it holds, ManCo does not (i) hold any other interest, directly or indirectly, in any Entity, nor (ii) have any asset other than cash, as the case may be.

(e) ManCo's net assets exceed €3,625,755.

(f) The Required Financials relating to ManCo, when delivered, will (i) have been derived from the books and records of ManCo, (ii) be true and correct in all material respects and (iii) fairly present the financial position, results of operations and cash flows of ManCo at the date and for the periods indicated therein, except as indicated in the footnotes thereto.

8.3.4Tax Matters

ManCo has kept all Tax documentation, information, software or hardware required to be kept by applicable Tax Law. ManCo has timely filed with the appropriate Governmental Authorities any and all Tax Returns that were required to be filed by or on behalf of ManCo on or before the Closing, and each such Tax Return, was and is complete and correct. ManCo has timely paid all Taxes shown to be payable in such Tax Returns.

8.3.5 Employees

ManCo has no employees and is not linked to any supplier or service provider. It has no liabilities of any kind towards former directors, employees or other suppliers.

8.3.6 Contracts

Except for the Existing Loan Agreements which shall automatically terminate at Closing pursuant to Section 5.12 above, provided that all the transactions contemplated hereby have been completed, ManCo has not entered into any Contracts that are still in force or likely to produce some effects.

8.3.7 Litigation

(a) There are and have been no Proceedings of any kind, currently pending or, to the Manco Shareholders' Knowledge, possibly foreseen, involving ManCo or to which ManCo is a party.
(b) Neither ManCo nor any of its Managers may incur any joint, indefinite or criminal liabilities resulting in a Loss.

8.3.8 Management since the Reference Date

(a) Since the Reference Date, ManCo has carried on its activities only in the ordinary course of business, with due care and attention as *bon père de famille* (*de façon prudente, diligente et soigneuse*) and in substantially the same manner as theretofore conducted and has not taken nor committed to take any of the actions set forth in Section 5.9(b) above, except as may have been (*x*) required by applicable Laws or any Governmental Authority or (*y*) expressly contemplated elsewhere in this Agreement, or (*z*) consented to in writing by the Purchaser in accordance with the provisions of Section 5.9.
(b) Since the Reference Date, no circumstance, event or fact relating to ManCo has occurred that may constitute a Material Adverse Change.

8.3.9 Intermediaries

(a) ManCo has no liability or obligation to pay any fees or commissions to any broker, finder, agent or advisor, including attorneys and chartered accountants, with respect to any of the transactions contemplated by this Agreement or relating to the Transaction.

(b) All professional fees or any other amounts due by ManCo to any advisors, including to attorneys and chartered accountants, have been paid and none of these advisors has any claim against ManCo.

8.3.10 Completeness of Representations and Warranties

(a) The ManCo Shareholders have not omitted to disclose or misstated to the Purchaser during the negotiation of the Transaction any material circumstances, events or facts whatsoever concerning ManCo or the ManCo Shares.

(b) The ManCo Shareholders have taken all necessary actions to obtain from ManCo all information necessary to enable them to make the representations contained in this Section 8.3.

(c) There is no circumstance, event or fact relating to ManCo that may constitute a Material Adverse Change that has not been set forth in this Agreement.

9. INDEMNIFICATION

9.1 Principle

(a) Liability of each Indemnifying Seller Individually

From and after the Closing and subject to the provisions of this Section 9, each Indemnifying Seller undertakes, only as to itself and only as to the Ordinary Shares, ORAs, OCRs, OBSAs and ManCo Shares it owns and to the Transferred Securities it will own, to indemnify and hold harmless the Purchaser, on a "euro" for "euro" basis (without application of any multiple or formula), from any Loss incurred or suffered by the Purchaser or any of the Target Companies in connection with any breach or inaccuracy of, or omission in, the representations and warranties made by each such Indemnifying Seller in Section 8.1 (for the avoidance of doubt, notwithstanding any disclosure of the same to the Purchaser (or any of its Affiliates) prior to Closing pursuant to Section 5.10(a) and/or clause 9(a) of the Put Option Agreement).

In addition, FPCI Winch Capital 3 hereby expressly undertakes, from and after the Closing and subject to the provisions of this Section 9, to indemnify and hold harmless the Purchaser, on a "euro" for "euro" basis (without application of any multiple or formula), from any Loss incurred or suffered by the Purchaser or any of the Target Companies in connection with any breach or inaccuracy of, or omission in, the representations and warranties made by Montalivet Networks in Section 8.1 (for the avoidance of doubt, notwithstanding any disclosure of the same to the Purchaser (or any of its Affiliates) prior to Closing pursuant to Section 5.10(a) and/or clause 9(a) of the Put Option Agreement).

(b) Liability of the Indemnifying Sellers Individually but not Jointly (*conjointement mais non solidairement*)

From and after the Closing and subject to the provisions of this Section 9, the Indemnifying Sellers (including FPCI Winch Capital 3, Mr. de Puyfontaine and FPCI CIC Mezzanine 3) undertake, individually but not jointly (*conjointement mais non solidairement*) (but, for the avoidance of doubt, without prejudice to the provisions of Section 11.10, which shall apply), to indemnify and hold harmless the Purchaser, on a "euro" for "euro" basis (without application of any multiple or formula), from any Loss incurred or suffered by the Purchaser or any of the Target Companies in connection with any breach or inaccuracy of, or omission in, the representations and warranties made in Section 8.2 (for the avoidance of doubt, notwithstanding any disclosure of the same to the Purchaser (or any of its Affiliates) prior to Closing pursuant to Section 5.10(a) and/or clause 9(a) of the Put Option Agreement), irrespective of whether such representations and warranties were made by all the Sellers (including Montalivet Networks) or by the

Sellers other than FPCI Winch Capital 3, Montalivet Networks, Mr. de Puyfontaine and FPCI CIC Mezzanine 3 and including, for the avoidance of doubt, to the extent of which any such representations and warranties has been made by Montalivet Networks.

(c) Liability of the ManCo Shareholders Individually but not Jointly (*conjointement mais non solidairement*)

From and after the Closing and subject to the provisions of this Section 9, the ManCo Shareholders undertake, individually but not jointly (*conjointement mais non solidairement*) (but, for the avoidance of doubt, without prejudice to the provisions of Section 11.10, which shall apply), to indemnify and hold harmless the Purchaser, on a "euro" for "euro" basis (without application of any multiple or formula), from any Loss incurred or suffered by the Purchaser or any of the Target Companies in connection with any breach or inaccuracy of, or omission in, the representations and warranties made in Section 8.3 (for the avoidance of doubt, notwithstanding any disclosure of the same to the Purchaser (or any of its Affiliates) prior to Closing pursuant to Section 5.10(a) and/or clause 9(a) of the Put Option Agreement).

(d) The Parties hereby agree that any sums relating to a Loss due by an Indemnifying Seller pursuant to the preceding Paragraphs (the "**Refund**") shall be paid to the Purchaser (or to the relevant Target Company, at the Purchaser's election).

(e) With respect to any Refunds paid pursuant to Sections 9.1(a) and 9.1(b) above, such payments shall be deemed to constitute an adjustment to the Final Price and, with respect to any Refunds paid pursuant to Section 9.1(c) above, such payments shall be deemed to constitute an adjustment to the Final Price within the limit of the portion of the Final Price represented by the ManCo Shares.

9.2<u>Calculation</u>

(a) In calculating the amount of the Refund relating to any Loss incurred or suffered by the Purchaser or any of the Target Companies, the following amounts shall be deducted:

(i) any Tax benefit effectively realized by the Purchaser or the relevant Target Companies attributable to (and that would not have arisen but for) the matter, event or circumstance giving rise to such Loss, provided that a Tax benefit shall be deemed to be realized only if it gives rise to a reduction of the amount of corporate Tax that would have been effectively paid in the absence of such Loss, on account of the financial year in which the Loss is accounted for;

(ii) any sum paid to the Purchaser or any Target Company net of any applicable income Tax (whether as indemnity or otherwise) by a Third Party in relation to such Loss, including any insurance proceeds (netted against deductibles, retroactive premiums, increases of premiums resulting from the matter, event or circumstance underlying such Loss over a period of twelve (12) months, collection costs and other costs associated with making or pursuing any such claims, as applicable);

(iii) any sum relating to such Loss actually taken into account for the determination of the Adjusted Initial Price as mentioned in the Purchaser Completion Statement, as agreed or determined in accordance with the provisions of Section 2.5 above;

(iv) any provision or reserve made in the Accounts in relation to the matter, event or circumstance which gave rise to such Loss.

(b) The amount of the Refund shall be increased by the amount of any Taxes which could be owed by the Purchaser or the relevant Target Companies as a result of the payment of such Refund.

(c) If and to the extent that any Loss is the result of (i) a Tax reassessment of a Target Company relating to the fiscal years ended on December 31, 2012, 2013, 2014 or 2015 whose sole effect is to shift a Tax liability from one fiscal year to another, or (ii) a Tax reassessment relating to value added tax that can be recovered by the relevant Target Company, the Refund shall be limited to the amount of any penalty or interest charge in relation thereto due by the relevant Target Company.

(d) For purposes of determining the amount of the Refund relating to any Loss under this Agreement, any amount which is not a Euro amount shall be converted from the relevant foreign currency into Euros by using the Relevant Exchange Rate.

(e) If the Indemnifying Sellers pay to or for the benefit of the Purchaser or the concerned Target Company an amount in respect of any Claim and the concerned Target Company subsequently receives from any other Person any payment in respect of the matter giving rise to such Claim, the Purchaser shall thereupon pay to the Indemnifying Sellers an amount equal to the payment received (except to the extent that the liability of the Indemnifying Sellers in respect of the Claim was reduced to take account of such payment) less any costs and expenses incurred by the Purchaser and/or the concerned Target Company in this respect. Such payment shall be made to such accounts of Indemnifying Sellers as shall be notified by the Sellers' Representative to the Purchaser for such purpose, together with the allocation of the amount of such payment among the Indemnifying Sellers. Such allocation shall be made under the sole and exclusive responsibility of the Sellers and the Purchaser and the Target Companies shall incur no liability whatsoever in respect thereto.

(f) The Purchaser hereby undertakes to inform, and to cause the relevant Target Companies to inform, in a timely manner the Sellers' Representative of the occurrence of any element which may be taken into account for purposes of Sections 9.2(a), 9.2(b), 9.2(c) and 9.2(e). Any Refund shall only be owed for the net amount of any Loss calculated (i) after deduction or addition, as the case may be, of the items referred to in Sections 9.2(a) and 9.2(b) and (ii) taking into account the provisions of Section 9.2(c).

(g) Solely for purposes of determining the amount of the Refund relating to any Loss under this Agreement, the representations, warranties, covenants and agreements of the Parties set forth in this Agreement shall be considered without regard to any qualification based on "materiality" or "Material Adverse Change" or terms of similar import.

(h) Notwithstanding anything to the contrary contained in this Agreement, neither any Seller nor the Sellers' Representative (on behalf of all the Sellers) shall have any right of contribution, indemnification or similar right from or against any Target Company with respect to any Claim arising in connection with any acts or omissions occurring at or prior to the Closing, and effective as of the Closing. Each Seller and the Sellers' Representative hereby waive and release the Target Companies, the Purchaser and each of their respective Affiliates from any such right of contribution, indemnification or similar right from or against any Target Company with respect to any Claim against such Seller or the Sellers' Representative (on behalf of all the Sellers).

9.3Exclusions - Limitations

9.3.1Exclusions

(a) The Indemnifying Sellers shall have no liability under this Section 9 in respect of any Loss which shall occur or be increased (but in this case only to the extent of such increase) as a result of:

(i) any retrospective change in any applicable Law occurring on or after Closing;

(ii) any change in valuation rules or accounting or Tax policies, practices and methods of any of the Target Companies compared to those used when preparing the Accounts occurring after Closing, except where such change is required to comply with applicable Laws;

(iii) any voluntary act, negligence, omission or transaction carried out on or after Closing by or at the written request of or with the written consent of the Purchaser or any of its Affiliates or any of their successors in title or assignees;

(iv) any action made by the Sellers or their Affiliates (including any of the Target Companies) pursuant to, or in accordance with this Agreement, it being specified that such exclusion shall not apply to any action made in the context of the preparation, audit and delivery of the Required Financials and of the implementation and completion of the IP Recovery or pursuant to Sections 5.1 to 5.5 of this Agreement;

(v) any damages solely attributable to diminution of value or lost profits or opportunities.

(b) The Indemnifying Sellers shall have no liability under this Section 9 in respect of any Loss incurred or suffered in connection with any breach or inaccuracy of, or omission in, a given representation and warranty in the event that such Loss occurs or is increased (but in this case only to the extent of such increase) as a result of any fact, event or circumstances which has been set forth in the Disclosure Schedules (i) expressly referring to such representation and warranty through a specific reference to the corresponding number of Subsection of Section 8 and letter of Paragraph of such Subsection and (ii) stating that it is an exception to such representation and warranty.

(c) Notwithstanding the fact that a Loss may result from a breach or inaccuracy of more than one of the representations and warranties of the Sellers hereunder, the Indemnifying Sellers' liability may only recover once in respect of such Loss (*i.e.*, no double recovery).

9.3.2Limitations

(a) Thresholds

Except as provided under Paragraph (d), no Refund shall be due under this Section 9, unless and only to the extent that the amount for which the Indemnifying Sellers may be liable under this Section 9, after application of the provisions of Section 9.2, exceeds:

(i) in respect of any single Claim other than Claims with respect to any Loss caused by, arising from or related to any breach or inaccuracy of, or omission in, any representation or warranty made under Section 8.2.17, an individual amount of fifty thousand Euros (€50,000), provided that such amount shall constitute a threshold (*seuil de déclenchement*) and not a deductible (*franchise*), the Indemnifying Sellers being liable for the total amount of such Loss and not only for the amount

of such Loss in excess of such threshold (it being agreed that a series of Losses arising from common origins shall be aggregated and treated as a single Loss);

(ii) in respect of any single Claim with respect to any Loss caused by, arising from or related to any breach or inaccuracy of, or omission in, any representation or warranty made under Section 8.2.17, an individual amount of ten thousand Euros (€10,000), provided that such amount shall constitute a threshold (*seuil de déclenchement*) and not a deductible (*franchise*), the Indemnifying Sellers being liable for the total amount of such Loss and not only for the amount of such Loss in excess of such threshold (it being agreed that a series of Losses arising from common origins shall be aggregated and treated as a single Loss); and

(iii) in the aggregate, in respect of all Claims, a cumulative threshold of an amount of three hundred and fifty thousand Euros (€350,000), provided that such amount shall constitute a threshold (*seuil de déclenchement*) and not a deductible (*franchise*), the Indemnifying Sellers being liable under this Section 9 when such threshold is reached and then for the entire amount of the Losses and not only for the amount of the Losses which is in excess of such threshold;

it being specified that none of such thresholds shall be applicable with respect to any Loss caused by, arising from or related to any breach or inaccuracy of, or omission in, any representation or warranty made under Sections 8.1, 8.2.1, 8.2.10(t), 8.2.16(g), 8.2.16(h), 8.2.24 and 8.3.

(b) Cap

Except as provided under Paragraph (d), the aggregate amount of the Refund for which the Indemnifying Sellers may be liable under this Section 9 shall in any circumstances be limited to:

(i) the Final Price, as converted from US Dollars into Euros by using the Escrow Closing Average Exchange Rate, in respect of any breach of the representations or warranties made under Sections 8.1, 8.2.1, 8.2.10(t), 8.2.16(g) and 8.2.16(h); and

(ii) US Dollars 13,500,000, as converted from US Dollars into Euros by using the Escrow Closing Average Exchange Rate, in respect of any breach of the representations or warranties made under Section 8.2 other than the representations or warranties made under Sections 8.2.1, 8.2.10(t), 8.2.16(g) and 8.2.16(h);

it being expressly specified that (i) such two caps shall be deemed independent so as the consummation of one of them shall not consummate the other and (ii) no cap shall apply in respect of any breach of the representations or warranties made under Section 8.3.

Notwithstanding the foregoing:

(i) the overall amount of Refund for which the Indemnifying Sellers (collectively) may be liable under this Section 9 in respect of any breach of the representations or warranties made under Section 8 other than the representations or warranties made under Section 8.3 shall be limited to the Final Price, as converted from US Dollars into Euros by using the Escrow Closing Average Exchange Rate;

(ii) the overall amount of Refund for which each Indemnifying Seller (other than FPCI Winch Capital 3) may be liable under this Section 9 in respect of any breach of the representations or

warranties made under Section 8 other than the representations or warranties made under Section 8.3 shall be limited to such Indemnifying Seller's Allocable Fraction of the Final Price, as converted from US Dollars into Euros by using the Escrow Closing Average Exchange Rate;

(iii) the overall amount of Refund for which FPCI Winch Capital 3 may be liable under this Section 9 in respect of any breach of the representations or warranties made under Section 8 other than the representations or warranties made under Section 8.3 shall be limited to the sum of (i) its Allocable Fraction of the Final Price and (ii) Montalivet Networks' Allocable Fraction of the Final Price, as converted from US Dollars into Euros by using the Escrow Closing Average Exchange Rate;

(iv) the overall amount of Refund for which each ManCo Shareholder may be liable under this Section 9 in respect of any breach of the representations or warranties made under Section 8.3 shall be limited to such ManCo Shareholder's Allocable ManCo Fraction of the overall amount of Refund for which the ManCo Shareholders (collectively) may be liable under this Section 9 in respect of any breach of the representations or warranties made under Section 8.3.

(c) Time Limitations

(i) A Claim may give right to a Refund if notice of such Claim is made before the date which is eighteen (18) months after the Closing Date, except for Claims made pursuant to Sections 8.1, 8.2.1, 8.2.16, 8.2.17 and 8.3 which may be made until thirty (30) Business Days after the expiration of the applicable statute of limitations with respect thereto.

(ii) The Indemnifying Sellers' obligations under this Section 9 shall continue as to any matter as to which a Claim is submitted in writing to the Sellers' Representative prior to the time limitations specified above and identified as a Claim (regardless of the fact that the amount of the potential Loss or Refund is not precisely known or determined at the time of the corresponding Claim Notice) until such time as such Claims and matters are resolved.

(d) Fraud and Willful Misconduct

The Indemnifying Sellers hereby expressly acknowledge that none of the limitations contained in Section 9.3 shall apply to and limit in any manner any Claim that arises as a result of fraud or willful misconduct by the Sellers or their Affiliates (including the Target Companies) prior to the Closing, or any Person whose liability the Sellers or their Affiliates (including the Target Companies) may have retained or assumed either contractually, by operation of applicable Law, or otherwise.

9.4Claim Notices

(a) In the event that the Purchaser considers in good faith that it has a claim to receive a Refund from the Indemnifying Sellers under this Section 9 (a "**Claim**"), then the Purchaser shall send to the Sellers' Representative a written notice (a "**Claim Notice**") which shall specify:

(i) the grounds for such Claim (including whether or not the Claim is based on a Third Party Claim); and

(ii) to the extent possible at the time of the Claim Notice, the amount or the estimated amount of the Loss giving rise to such Claim and of the Refund claimed in respect thereto;

all with reasonable particularity and containing a reference to the provisions of this Agreement in respect of which a right to be paid is claimed, and such available supporting evidence as may reasonably be needed by the Indemnifying Sellers to assess the merits of the Claim and, to the extent possible, the computation of the Refund or the estimate of the Loss giving rise to the Claim.

(b) The Claim Notice shall be sent by the Purchaser to the Sellers' Representative:

(i) if the Claim arises in connection with any claims, verifications or judicial or administrative proceedings by any Third Party (a "**Third Party Claim**"); within twenty (20) Business Days after receipt by the relevant Target Company of actual notice of such Third Party Claim or, if required by the circumstances (e.g.; in the case of emergency proceedings or when a response to notification must be given within a time period in order to avoid a forfeiture of rights), within a shorter period, if practicable, to enable the Sellers' Representative to exercise its rights hereunder to participate in the defense of the relevant Target Company's interests; and

(ii) for any other Claims, no later than thirty (30) Business Days after the Purchaser or the relevant Target Company first becomes aware of the facts upon which the Claim is based;

provided that any failure to notify a Claim in due time shall have no consequence on the validity of such Claim nor shall relieve the Indemnifying Sellers of any liability they may have to the Purchaser in respect of such Claim. In addition, the failure to notify a Claim in due time shall not reduce the amount of the Loss to be covered by the Indemnifying Sellers in respect to such Claim nor the amount of the Refund relating to such Loss, except to the sole extent that such failure results in an increase of such Loss and only within the limit of the amount of such increase.

(c) The Sellers' Representative (on behalf of the relevant Indemnifying Seller or of all the Indemnifying Sellers or of all the ManCo Shareholders) may object in whole or in part to a Claim in a written statement (providing explanations with supporting evidence as may reasonably be required to assess the merits of such objection) (the "**Response**") within thirty (30) days (or such shorter period of time to permit the Purchaser to take the necessary action as required by the circumstances or to meet procedural deadlines) after receipt of the corresponding Claim Notice, failing which it shall be irrevocably deemed to have agreed upon such Claim on behalf of the relevant Indemnifying Seller, of all the Indemnifying Sellers or of all the ManCo Shareholders, as the case may be. In case of objection notified by the Sellers' Representative in accordance with the provisions of this Paragraph, the Sellers' Representative and the Purchaser shall meet within thirty (30) days (or such shorter period of time to permit the Purchaser to take the necessary action as required by the circumstances or to meet procedural deadlines) following the receipt of the Response by the Purchaser in order to attempt in good faith to reach an agreement with respect to (i) the validity of the Claim and/or, (ii) if the corresponding Claim Notice included the Purchaser's final determination of the amount of the Loss giving rise to such Claim and of the Refund claimed in respect thereto and in the event that such amounts are disputed, the amount of such Claim. If no such agreement can be reached after good faith negotiations within a period of thirty (30) days following the receipt by the Purchaser of the Response relating to the corresponding Claim Notice, the dispute may be settled in accordance with the provisions of Section 11.12.

9.5 **Claims Involving Third Parties**

(a) In the event of a Third Party Claim, the procedure described in this Section 9.5 shall apply and the Purchaser shall (i) provide to the Sellers' Representative any relevant documentation(s) sent by the Third Party in question giving notice of the Third Party Claim, (ii) keep the Sellers' Representative informed of any development of the Third Party Claim, (iii) provide the Sellers' Representative (at the Sellers' expense) with copies of all relevant documents and such other information relating to the Third Party

Claim in its possession as may be reasonably requested by the Sellers' Representative, and (iv) consider to the extent possible, but without any obligation to follow, any reasonable advice or suggestions provided by the Sellers' Representative.

(b) Whenever the Purchaser or a Target Company is entitled to recover any amounts which could be or has been the subject of a Claim hereunder, the Purchaser shall make its, and shall cause the relevant Target Company to make its reasonable efforts to avoid or mitigate any Loss, including prosecuting diligently and in good faith any claim that it or any of the Target Companies may have to receive indemnification or any other recovery (including insurance proceeds) from any Third Party.

(c) The Sellers' Representative (on behalf of the relevant Indemnifying Seller, of all the Indemnifying Sellers or of all the ManCo Shareholders) may participate, at the Sellers' expense, in the defense of any Third Party Claim with counsel of its choice, who shall cooperate with the counsel of the Purchaser or the Target Company concerned. The Sellers' Representative shall exercise its rights under this Section 9.5 reasonably, in good faith and taking into account the reasonable corporate and commercial interests of the Target Companies. The Purchaser shall provide and shall cause the Target Companies to provide the Sellers' Representative with all information or documents in relation to the Third Party claim which the Sellers' Representative may reasonably request. The Sellers' Representative shall notify the Purchaser of its intent to participate to the defense of such Third Party Claim within twenty (20) Business Days from the date of receipt of the Claim Notice. Failing the receipt by the Purchaser of such notification within such period of time, the Sellers' Representative shall be deemed having waived its rights to participate to the defense of the given Third Party Claim.

(d) The Purchaser, acting reasonably and in good faith, may, and may cause the Target Companies to, make any admission of liability, agreement, settlement or compromise with any third Party in relation to any Third Party Claim after having informed and obtained the prior written consent of the Sellers' Representative, which consent shall not be unreasonably withheld.

(e) The Purchaser shall ensure that the Sellers' Representative and its advisors are given such information and documents relating to the Third Party Claim as the Sellers' Representative and its advisors may reasonably require in connection therewith.

9.6Duty to Mitigate

The Parties shall procure that all reasonable steps are taken and all reasonable assistance is given to avoid or mitigate any Loss which in the absence of mitigation might give rise to a liability in respect of any Claim. The Indemnifying Sellers shall not be liable for any increase in the amount of a Loss (but only to the extent of such increase) if and to the extent such increase is attributable to the absence of mitigation of the Loss by the Purchaser.

9.7Disclosures

(a) No Indemnifying Seller shall be released, in all or in part, from its obligations to pay a Refund to the Purchaser in connection with a Claim by invoking any lack of awareness of the facts in question. Notwithstanding the foregoing, the Indemnifying Sellers may invoke the lack of awareness of the facts giving rise to a Claim each time a representation or warranty granted under this Agreement starts with or includes the following expression: "to the Sellers' Knowledge".

(b) Notwithstanding anything to the contrary in this Agreement, the Indemnifying Sellers shall not be released, in all or in part, from their obligation to indemnify the Purchaser in connection therewith by invoking

any knowledge that the Purchaser has, may have or should have of the facts giving rise to the Claim (including as a result of any investigations made by the Purchaser or any oral or written disclosure made by the Sellers or their Affiliates (including the Target Companies) or their respective Connected Persons during the due diligence, whether through the Data Room or otherwise, the negotiations, pursuant to Section 5.10 above or clause 9 of the Put Option Agreement, in this Agreement or in the Schedules thereto other than the relevant Disclosure Schedules). Without limiting the generality of the foregoing, any representation and warranty of the Sellers made under Section 8 is subject only to the corresponding Disclosure Schedules.

(c) The approval by the Purchaser, as shareholder of ManCo, of the Holding or otherwise, of the financial statements of any of the Target Companies related to any period ending on or after the Closing Date shall not constitute, where applicable, a waiver by the Purchaser of its right to indemnification under this Section 9.

9.8<u>Payment</u>

(a) Subject to the limitations set forth in Section 9.3 above, payments of Refunds shall be made in Euros as follows:

(i) in connection with a Third Party Claim, within ten (10) Business Days following receipt by the Sellers' Representative of a notice sent by the Purchaser evidencing that the amount of the Third Party Claim is being due and payable as a result of a final enforceable and non-appealable decision of the court or as a result of the execution of a settlement agreement; and

(ii) in connection with any other Claim, within fifteen (15) Business Days following the date on which the Sellers' Representative and the Purchaser are or are deemed to be in agreement on the validity and the amount of the Claim in accordance with Section 9.4 above, or in the event of a disagreement between the Sellers' Representative and the Purchaser, following the date (i) of the final enforceable and non-appealable decision rendered in accordance with Section 9.4 and Section 11.12 in respect of such disagreement or (ii) of execution by the Sellers' Representative and the Purchaser of any settlement agreement with respect to such disagreement.

(b) The Purchaser or the Target Companies shall have the right, but not the obligation, to offset any amount due to it by the Indemnifying Sellers under this Section 9.8, as converted from Euros into US Dollars by using the Closing Average Exchange Rate, against any amount which may remain payable to the Sellers under this Agreement.

(c) Any payment required to be made pursuant to this Section 9.8 which is not made before the expiry of a thirty-day (30) period from its due date, shall carry interest at the rate of ten (10) percent per annum (on the basis of a year of 365 days) from the due date for payment until (and including) the date of actual payment.

(d) The rules of allocation of the Refund among the Indemnifying Sellers shall be determined in accordance with Sections 2.9, 9.1 and 9.3.2(b) above, it being expressly specified, for the avoidance of doubt, that:

- Each Indemnifying Seller shall be fully liable for the payment of any Refund relating to a Loss incurred or suffered by the Purchaser or any of the Target Companies in connection with any breach or inaccuracy of, or omission in, the representations and warranties made by such Seller in Section 8.1;

- FPCI Winch Capital 3 shall be fully liable for the payment of any Refund relating to a Loss incurred or suffered by the Purchaser or any of the Target Companies in connection with any breach or inaccuracy of, or omission in, the representations and warranties made by Montalivet Networks in Section 8.1;

- Without prejudice to the provisions of Section 11.10 below, which shall apply, for the payment of any Refund relating to a Loss incurred or suffered by the Purchaser or any of the Target Companies in connection with any breach or inaccuracy of, or omission in, the representations and warranties made by the Sellers individually but not jointly (*conjointement mais non solidairement*) in Section 8.2, (i) each Indemnifying Seller (other than FPCI Winch Capital 3) shall be liable for its Allocable Fraction of such Refund and (ii) FPCI Winch Capital 3 shall be liable for the sum of (*x*) its Allocable Fraction of such Refund and (*y*) Montalivet Networks' Allocable Fraction of such Refund; and

- Without prejudice to the provisions of Section 11.10 below, which shall apply, for the payment of any Refund relating to a Loss incurred or suffered by the Purchaser or any of the Target Companies in connection with any breach or inaccuracy of, or omission in, the representations and warranties made by the ManCo Shareholders individually but not jointly (*conjointement mais non solidairement*) in Section 8.3, each ManCo Shareholder shall be liable for its Allocable ManCo Fraction of such Refund.

9.9Collateral

(a) On the Closing Date and as guarantee of any Sellers' payment obligations under Section 2.6, Section 3.3(d) and this Section 9, the Indemnifying Sellers and the Purchaser shall enter into the Escrow Agreement and the Purchaser shall transfer the Amount in Escrow to the Escrow Account in accordance with the provisions of Section 2.4, as security for the Downward Adjustment (if any), the Remaining Purchaser IP Recovery Cost and Expenses and the Claims made under this Section 9. All interests or revenue of any nature whatsoever deriving from the Amount in Escrow shall be allocated among the Purchaser and the Indemnifying Sellers *pro rata* the portion of the principal of the Amount in Escrow to be released to each of them pursuant to the Escrow Agreement, Sections 2.6 and 3.3(d) above and this Section 9.9.

(b) The Amount in Escrow shall be kept and shall remain in the Escrow Account pursuant to the provisions of the Escrow Agreement. Such agreement shall provide that the Amount in Escrow be released in all or in part to the Purchaser in accordance with Sections 2.6 and 3.3(d) above and as soon as any payment is due by any Indemnifying Seller pursuant to Section 9.8, upon notification of the Sellers' Representative and the Purchaser to such effect. It shall only be released to the Sellers upon joint notification of the Sellers' Representative and the Purchaser in respect thereto.

(c) To the extent that the amount remaining in the Escrow Account is insufficient to satisfy in full any amount due to the Purchaser pursuant to Section 9.8, the excess shall be paid within the timeframe provided for in Section 9.8(a) to the Purchaser by the relevant Indemnifying Sellers by wire transfer in immediately available Euro funds to the bank account(s) whose details shall be notified by the Purchaser to the Sellers' Representative no later than five (5) Business Days in advance.

9.10Exclusivity of Remedy

(a) Save in the event of fraud, fraudulent misrepresentation *(dol)* or dishonesty of the Sellers, the indemnification provided for in this Section 9 shall be after the Closing Date the exclusive remedy of the

Purchaser against the Indemnifying Sellers in respect of the indemnification of any Loss arising out of a breach of the representations and warranties of the Sellers set forth in Section 8 and the Purchaser hereby waives any right that it may have to rescission or termination of this Agreement in such respect.

(b) Notwithstanding anything to the contrary in this Agreement, (i) all rights and/or remedies available under applicable Laws shall remain available to the Purchaser in case of breach by any Seller of any of its covenants, undertakings or obligations (other than the representations and warranties of the Sellers set forth in Section 8) under this Agreement (including as Sellers' Representative), including the right to claim damages, and (ii) nothing herein shall prevent the Purchaser from seeking and obtaining injunction relief or specific performance (*exécution forcée*) in respect of any obligation under this Agreement and the other Transaction Documents, which the Sellers expressly acknowledge. In such respect, each Seller hereby waives irrevocably its rights under Article 1142 of the French Civil Code (*Code civil*).

10.<u>TERMINATION</u>

10.1<u>Primary Causes</u>

This Agreement may be terminated, and the transactions contemplated hereby may be abandoned, at any time prior to the Closing:

(a) by mutual written consent of the Purchaser and the Sellers' Representative (on behalf of all the Sellers);

(b) by either the Purchaser or the Sellers' Representative (on behalf of all the Sellers) upon written notice served to the non-terminating Party, if any permanent injunction or action by any Governmental Authority of competent jurisdiction prohibiting consummation of the transactions contemplated by this Agreement shall have been issued or taken and shall have become final and non-appealable;

(c) by the Sellers' Representative (on behalf of all the Sellers) (so long as none of the Sellers is at such time in breach of any of its material representations, warranties, covenants or agreements contained in this Agreement) upon written notice served to the Purchaser, if (i) the Purchaser shall fail to comply with its obligations set forth in Section 3 on a timely basis and/or with its obligations set forth in Section 4 before the end of the Closing Date, and (ii) such failure to comply has not been cured within five (5) Business Days after the notice by the Sellers' Representative to the Purchaser of the said failure to comply, it being expressly agreed that such termination would be in addition to and without prejudice to all other rights and/or remedies available to the Sellers against the Purchaser including the right to claim damages;

(d) by the Purchaser (so long as the Purchaser is not at such time in breach of any of its material representations, warranties, covenants or agreements contained in this Agreement) upon written notice served to the Sellers' Representative, if (i) any of the Sellers shall fail to comply with its obligations set forth in Section 3 on a timely basis and/or with its obligations set forth in Section 4 before the end of the Closing Date, and (ii) such failure to comply has not been cured within five (5) Business Days after the notice by the Purchaser to the Sellers' Representative of the said failure to comply, it being expressly agreed that such termination would be in addition to and without prejudice to all other rights and/or remedies available to the Purchaser against the Sellers including the right to claim damages;

(e) by the Purchaser upon written notice served to the Sellers' Representative, in accordance with the provisions of Section 5.10(b).

10.2 Non-Occurrence of the Closing

(a) This Agreement may be terminated by the Purchaser upon written notice served to Sellers' Representative on the Business Day following the Long Stop Date, in the event that the Closing does not take place on or before the Long Stop Date, because the Conditions Precedent set forth in Sections 3.1(b) to 3.1(d) are not satisfied or validly waived; or

(b) This Agreement may be terminated by either the Purchaser or the Sellers' Representative (on behalf of all the Sellers) upon written notice served to the non-terminating Party on the Business Day following the Long Stop Date, in the event that the Closing does not take place on or before the Long Stop Date for any reason other than the non-satisfaction (and absence of waiver) of the Conditions Precedent set forth in Sections 3.1(b) to 3.1(d), unless such eventuality shall be due to the breach by the Party (or Parties) seeking to terminate this Agreement of any of the covenants, agreements or other undertakings set forth in this Agreement to be performed or observed by such Party (or Parties) prior thereto.

10.3 Effect of Termination

If this Agreement is terminated pursuant to Sections 10.1 or 10.2, no Party hereto (or any of its Affiliates and Connected Persons) will have any liability or further obligation under this Agreement to any other Party to this Agreement, except for (a) any liability that shall have accrued prior to such termination, (b) any liability arising out of any breach of this Agreement prior to such termination and (c) the obligations set forth in Section 11 (*General Provisions*), which shall survive termination (save for Section 11.1).

11. GENERAL PROVISIONS

11.1 Cooperation

Each of the Parties hereby undertakes to make every effort to take all measures or to ensure that all measures necessary or advisable under applicable Laws are taken in a timely manner for the consummation of the transactions contemplated by this Agreement.

11.2 Confidentiality

11.2.1 Public Announcements

(a) As from the date of this Agreement, neither any of the Sellers nor the Purchaser shall, and the Sellers and the Purchaser shall procure that none of their respective Affiliates, representatives or advisors shall, issue or cause the publication of any press release or other public announcement or disclosure with respect to this Agreement or the transactions contemplated hereby without the prior written consent of the Purchaser (if the requesting Party is a Seller) or the Sellers' Representative (if the requesting Party is the Purchaser), which consent shall not be unreasonably withheld, except that each Party (or any of its Affiliates) shall be permitted to make such public announcements as may be required by applicable Law.

(b) In the event any such press release, public announcement or other disclosure is required by applicable Law to be made by any Party (or any Affiliate of any Party), the relevant Party shall notify the Purchaser (if the requesting Party is a Seller) or the Sellers' Representative (if the requesting Party is the Purchaser) prior to the issuance or making of any such press release, public announcement or other disclosure and shall use its commercially reasonable endeavors to consult in good faith with the Purchaser or the Sellers' Representative (as the case may be) and to take into account the reasonable requirements of the Purchaser or the Sellers' Representative (as the case may be) as to the timing, contents and manner of making any such press release, public announcement or other disclosure.

(c) Except to the extent that the Sellers or any Target Company is required by applicable Law to make any such communication, the Sellers' Representative and the Purchaser shall consult with each other concerning the means by which the Target Companies' customers and suppliers and others having dealings with the Target Companies will be informed of the transactions contemplated by this Agreement.

11.2.2Non-Disclosure

(a) Each Party shall, and shall procure that its Affiliates, keep confidential all information provided to them by or on behalf of the other Parties (or their Affiliates) or otherwise obtained by them in connection with this Agreement which relates to such other Parties (or their Affiliates), except: (i) as may be required by applicable Laws or any Governmental Authority; and (ii) regarding any information which may be or become known to the public other than because of a breach of the non-disclosure obligation thereon.

(b) Each of the Sellers undertakes, on its behalf and on behalf of its Affiliates, for a period from the Closing Date until the third anniversary of the Closing Date, not to disclose to any Person any confidential information relating to any Target Companies or their business, in particular in respect of business strategy, customers and suppliers, except as may be required by applicable Laws or any Governmental Authority.

11.3Absence of Third-Party Rights - Assignment

Except as expressly provided herein, this Agreement shall inure to the benefit of, and be binding upon, the Parties hereto and their respective successors and assigns; provided, however, that none of the Parties shall assign any of its rights or delegate any of its obligations created under this Agreement without the prior written consent of the other Parties. Notwithstanding anything to the contrary in this Agreement (including the foregoing), the Purchaser is entitled to assign any or all of its rights, interests, or obligations hereunder to any other Affiliate of the Mother Company, including any new company incorporated by the Mother Company or any Affiliate of the Mother Company for that purpose, without having to obtain the consent of the other Parties, which such other Parties hereby expressly acknowledge and agree.

11.4Guarantee of the Purchaser's payment obligations

(a) The Mother Company hereby unconditionally guarantees to the Sellers (as a "*caution solidaire*") (the "**Mother Company Guarantee**") the performance of the Purchaser's payment obligations under the terms of this Agreement (the "**Guaranteed Obligations**").

(b) The Mother Company undertakes with the Sellers that, if and whenever the Purchaser does not pay any amount when due under this Agreement, it shall pay such amount within five (5) Business Days following receipt of a written notification sent by the Sellers' Representative specifying that the Purchaser did not perform any Guaranteed Obligation when due under this Agreement.

(c) The Mother Company hereby irrevocably and expressly undertakes not to exercise, and waives to the fullest extent lawful:

(i) Any right that it may have under Articles 2298 (*bénéfice de discussion*) and 2303 (*bénéfice de division*) of the French Civil Code;

(ii) Any rights that it may have under Article 2316 of the French Civil Code to take any action against the Purchaser in the event of any extension of any date for payment of any amount due, owing or payable to the Sellers under this Agreement or any other time indulgence granted by the Sellers to the Purchaser, which is made without the consent of the Mother Company; and

(iii) Any rights that it may have at any time with respect to any indulgence, release of payment, whether in whole or in part, or any other measures imposed on any of the creditors generally of the Purchaser in a bankruptcy, insolvency, liquidation or similar or analogous proceeding.

(d) The Mother Company shall not be entitled to transfer or assign its rights and obligations under this Mother Company Guarantee without the prior consent of the Sellers' Representative. Notwithstanding the foregoing, this Mother Company Guarantee shall remain in full force and effect in case of merger, spin-off or any other operation which entails universal transfer of asset (*transmission universelle du patrimoine*) and which is affecting the Purchaser.

(e) This Mother Company Guarantee shall remain in full force and effect as long as any Guaranteed Obligation has not been irrevocably and indefeasibly paid in full.

11.5<u>Entire Agreement</u>

This Agreement (including its Schedules and together with the Confidentiality Agreement and the Put Option Agreement) represents the entire agreement and understanding of the Parties with reference to the transactions set forth herein and no representations or warranties have been made in connection with this Agreement other than those expressly set forth herein. This Agreement supersedes all prior negotiations, discussions, correspondence, communications, understandings and agreements other than the Put Option Agreement between the Parties relating to the subject matter of this Agreement and all prior drafts of this Agreement, all of which are merged into this Agreement. No prior drafts of this Agreement may be used to show the intent of the parties in connection with this Agreement or shall otherwise be admissible into evidence in any proceeding or other legal action involving this Agreement.

11.6<u>Waivers and Amendments</u>

No modification of or amendment to this Agreement shall be valid unless set forth in an instrument in writing signed by each of the Parties hereto referring specifically to this Agreement and stating the Parties' intention to modify or amend the same. Any waiver of any term or condition of this Agreement must be set forth in an instrument in writing signed by the waiving Party and must refer specifically to the term or condition to be waived and to the circumstances of such waiver. No such waiver shall be deemed to constitute a waiver applicable either to other circumstances involving the same term or condition or to any other term or condition of this Agreement.

11.7 Severability

This Agreement shall be deemed severable, and the invalidity or unenforceability of any term or provision hereof shall not affect the validity or enforceability of this Agreement or of any other term or provision hereof. Furthermore, in lieu of any such invalid or unenforceable term or provision, the Parties hereto intend that there shall be added as a part of this Agreement a provision as similar in terms to such invalid or unenforceable provision as may be possible and be valid and enforceable.

11.8 Notices and Communications

(a) Except as otherwise specifically provided for hereunder, all notices and other communications required or permitted to be given or made pursuant to this Agreement shall be in writing in the English language and shall be: (*x*) delivered by hand against an acknowledgement of delivery dated and signed by the recipient; (*y*) sent by an overnight courier service of recognized international standing (all charges paid); or (*z*) sent by E-mail or facsimile transmission and confirmed by registered mail (postage prepaid, return receipt requested) (*lettre recommandée avec demande d'avis de réception*) posted no later than the following Business Day, to the relevant Party at its address, E-mail address and/or fax number set forth below:

If to the Purchaser, to: **Harmonic International AG**

Avenue de la Gare 12
1700 Fribourg, Switzerland
Attn: Raphael Segur
E-mails: Raphael.Segur@harmonicinc.com and
harmoniclegal@harmonicinc.com

With a copy to: **Harmonic Inc**.

4300 North First Street
San Jose, CA 95134, United States of America
Attn: Timothy Chu, *General Counsel*
E-mails: tim.chu@harmonicinc.com and
harmoniclegal@harmonicinc.com

And to: **Shearman & Sterling LLP**

114, avenue des Champs-Elysées
75008 Paris, France
Attn : Nicolas Bombrun
E-mail : Nicolas.Bombrun@Shearman.com
Phone: +33.1.53.89.48.48
Fax: +33.1.42.99.78.00

If to a Seller, to: The Sellers' Representative

Mr. Delahousse

15, rue Trébois
92300 Levallois-Perret, France

Attn: Christophe Delahousse
E-mail: christophe.delahousse@thomson-networks.com
Fax: +33.01.34.25.96.80

With a copy to: **Orrick Rambaud Martel**

31 avenue Pierre 1er de Serbie
75782 Paris cedex 16, France
Attn : Saam Golshani
E-mail: sgolshani@orrick.com
Phone: +33 1 53 53 75 00
Fax : + 33 1 53 53 75 01

or to such other Persons or at such other addresses and/or fax numbers as hereafter may be furnished by the Purchaser or the Sellers' Representative by like notice to the other.

(b) A notice or a communication shall be deemed to have been received:

(i) at the time of delivery if delivered personally;

(ii) at the time of delivery or transmission (if such delivery or transmission is confirmed) if sent by E-mail or by fax;

(iii) two (2) Business Days after the time and date of mailing if sent by pre-paid inland registered mail; or

(iv) five (5) Business Days after the time and date of mailing if sent by pre-paid registered airmail;

provided that if deemed receipt of any notice or communication occurs after 7:00 p.m. or is not on a Business Day, deemed receipt of the Notice shall be 9:00 a.m. on the next Business Day. References to time in this Section 11.8 are to local time in the country of the addressee.

11.9Sellers' Representative

(a) Mr. Delahousse is hereby unconditionally, irrevocably and exclusively appointed as the representative of the Sellers for the purposes of any consent, notice, action or step to be given, conducted or taken hereunder for which this Agreement expressly provides that such consent, notice, action or step is to be given, conducted or taken by the Sellers' Representative. In all cases where the Agreement so refers to a consent, notice, action or step to be given, conducted or taken by the Sellers' Representative, Mr. Delahousse shall be the sole Person entitled to act in the name and for the account ("*au nom et pour le compte*") of all Sellers, in the capacity of the Sellers' joint representative ("*mandataire commun*") in accordance with article 1984 *et seq*. of the French Civil Code. The Sellers shall be bound by any decision and act of the Sellers' Representative made in accordance with this Agreement. The Sellers' Representative shall be appointed for the term of this Agreement and shall not be revoked by the Sellers during such term. Mr. Delahousse hereby accepts and undertakes to act as Sellers' Representative for the term of this Agreement. The Purchaser shall not be bound or deemed to be bound by any separate agreement or arrangement between the Sellers to which the Purchaser is not a party.

(b) Notwithstanding anything to the contrary in this Agreement, should Mr. Delahousse, hereby appointed, be unable to perform his duties in acting as the Sellers' Representative, for any reason whatsoever,

Mr. Congard will replace him as Sellers' Representative. In such case, Mr. Congard must notify to each Seller and to the Purchaser that he is henceforth acting as the Sellers' Representative.
Should Mr. Congard be unable to perform his duties to act as the Sellers' Representative, for any reason whatsoever, the Sellers' Representative will be appointed among the Sellers by the Sellers. If the Sellers do not reach an agreement within ten (10) days of the date Mr. Congard has ceased to perform his duties as Sellers' Representative, then the Sellers' Representative shall be appointed among the Sellers by the President of the Commercial Court of Paris ruling in summary form (*statuant en référé*), such ruling being unchallengeable in appeal.

11.10 Parties acting Severally and Jointly (*conjointement et solidairement*)

(a) Notwithstanding anything to the contrary in this Agreement, Mr. Delahousse is acting severally and jointly (*conjointement et solidairement*) with Mrs. Laure Delahousse, Mrs. Camille Delahousse, Mr. Edouard Delahousse and Mrs. Constance Delahousse for purposes of this Agreement.

(b) Notwithstanding anything to the contrary in this Agreement, Mr. Congard is acting severally and jointly (*conjointement et solidairement*) with Mr. Louis Congard and Mrs. Anne Congard for purposes of this Agreement.

(c) Notwithstanding anything to the contrary in this Agreement, FPCI Winch Capital 3 is acting severally and jointly (*conjointement et solidairement*) with Montalivet Networks for purposes of this Agreement.

11.11 Costs and Expenses

(a) The Purchaser and the Sellers shall each be responsible for payment of all fees and costs respectively incurred in connection with the negotiation, preparation and signing of this Agreement and the consummation of the transactions contemplated hereby, including the fees and disbursements of their respective financial advisors, accountants and attorneys.

(b) Any transfer or stamp taxes (including any *droits d'enregistrement*) or similar levies that may become payable as a result of the signing of this Agreement or the transfer of the Shares pursuant hereto shall be borne by the Purchaser and shall be paid on a timely basis in compliance with all statutory requirements. The Purchaser shall provide the Sellers' Representative with evidence of the payment of any such taxes or levies promptly upon the written request of the Sellers' Representative.

11.12 Governing Law and Disputes

This Agreement shall be exclusively governed by and construed in accordance with the laws of France. Any dispute, controversy, proceedings or claim of whatever nature arising out of or in any way relating to this Agreement (or any matters contemplated under this Agreement) or its formation or its validity or its interpretation or its performance shall be submitted to the sole and exclusive jurisdiction of the Commercial Court of Paris (*Tribunal de Commerce de Paris*).

11.13 Language

The Language of this Agreement and the transactions envisaged by it is English and all notices, demands, requests, statements, certificates or other documents or communications in connection with this Agreement and the transactions envisaged by it shall be in English unless otherwise agreed.

11.14 **Volume II**

Volume II of this Agreement, which is comprised of Schedules 8.2.1(c) to 8.3.3(a) to this Agreement, is contained in a CD-Rom entitled "Sale and Purchase Agreement dated February 11, 2016 - Volume II/II" reproduced in twenty-two (22) copies, each of which has been signed in the name and on behalf of all Parties to this Agreement by their respective authorized signatories on the date hereof, which each Party hereto expressly acknowledges and agrees.

* *

*

Made in Paris, on February 11, 2016, in twenty-two (22) original copies.

[***Signatures on the following pages***]

Signed on February 11, 2016 by:

KEPLER M2:

____

KEPLER M2
Being a party to this Agreement for the sole purpose of Sections 5.1 to 5.5, 5.9 and 5.12
By: Mr. Christophe Delahousse
Position: President

AND EACH OF THE SELLERS:

Mr. Eric Louvet
Represented by Mr. Christophe Delahousse

Mr. Eric Gallier
Represented by Mr. Christophe Delahousse

Mr. Jean-Marc Guiot
Represented by Mr. Christophe Delahousse

Mr. Claude Perron
Represented by Mr. Christophe Delahousse

Mrs. Crystele Trévisan-Jallu
Represented by Mr. Christophe Delahousse

Mrs. Delphine Sauvion
Represented by Mr. Christophe Delahousse

Mr. Marc Procureur
Represented by Mr. Christophe Delahousse

Mr. Christophe Delahousse

Signed on February 11, 2016 by:

AND EACH OF THE SELLERS (CONTINUATION):

Mrs. Laure Delahousse
Represented by Mr. Christophe Delahousse

Mrs. Camille Delahousse
Represented by Mr. Christophe Delahousse

Mr. Edouard Delahousse
Represented by Mr. Christophe Delahousse

Mrs. Constance Delahousse
Represented by Mr. Christophe Delahousse

Mr. Hervé Congard
Represented by Mr. Christophe Delahousse

Mr. Louis Congard
Represented by Mr. Christophe Delahousse

Mrs. Anne Congard
Represented by Mr. Christophe Delahousse

Signed on February 11, 2016 by:

AND EACH OF THE SELLERS (CONTINUATION):

FPCI Winch Capital 3
Represented by Edmond de Rothschild Investment Partners SCA
Itself represented by: Mr. Sylvain Charignon
Title: Gérant

Montalivet Networks
Represented by Edmond de Rothschild Investment Partners SCA
Represented by: Mr. Sylvain Charignon
Title: Gérant

FPCI CIC Mezzanine 3
Represented by CM-CIC Private Debt SAS
Itself represented by: Mr. Sylvain Charignon or Mr. Laurent Tourtois or Mr. Thomas Duteil, each of them being duly authorized for the purpose hereof

Mr. Arnaud de Puyfontaine
Represented by: Mr. Sylvain Charignon or Mr. Laurent Tourtois or Mr. Thomas Duteil, each of them being duly authorized for the purpose hereof

Signed on February 11, 2016 by:

THE PURCHASER:

____

HARMONIC INTERNATIONAL AG
By: Mr. Raphael Segur
Position: Member and President of the Board of Directors

Signed on February 11, 2016 by:

HARMONIC INC.:

____

HARMONIC INC.

Entering into this agreement for the sole purpose of Section 11.4

By: Mr. Patrick Harshman

Position: CEO

SCHEDULE 1.1

Definitions

In addition to such terms as are defined elsewhere in this Agreement, wherever used in this Agreement (including the Recitals) and unless the context otherwise requires, the following terms shall have the following meanings:

"**2015 Actual Revenues**"	has the meaning ascribed to it in Section 2.7.1(a).
"**2015 Consolidated Accounts**"	shall mean, with respect to the Group Companies, the audited consolidated balance sheet (« *bilan* ») and profit and loss accounts (« *compte de résultat* ») (together with the notes attached thereto) of the Holding in respect of the financial year ending on December 31, 2015, prepared in accordance with French GAAP and certified by the Holding's statutory auditors.
"**2015 Product Backlog**"	has the meaning ascribed to it in Section 2.7.2(a).
"**Abandoned Patents**"	shall mean Patents in FB Held Patent Rights, which have lapsed or have been abandoned by France Brevets, with the agreement of Kepler.
"Accounts"	shall mean: (A) with respect to the Group Companies, the unaudited combined balance sheet (« *bilan* ») and profit and loss accounts (« *compte de résultat* ») of the Holding as of December 31, 2014 prepared by PricewaterhouseCoopers in accordance with French GAAP and as of the Reference Date prepared in accordance with French GAAP; (B) with respect to each Target Company (other than the Holding, ManCo, Thomson Video Networks Asia Pacific Pte Ltd, Thomson Video Networks India Private Limited, Thomson Video Networks Italia Srl, Thomson Video Networks Espana S.L. and Thomson Video Networks do Brasil Ltda): (a) that Target Company's audited balance sheet (« *bilan* ») and profit and loss accounts (« *compte de résultat* ») (together with the notes attached thereto) as of December 31, 2014, prepared in accordance with French GAAP and certified by that Target Company's statutory auditor(s), and (b) that Target Company's unaudited balance sheet (« *bilan* ») and profit and loss accounts (« *compte de résultat* ») as of the Reference Date prepared in accordance with French GAAP;

(C) with respect to Thomson Video Networks Asia Pacific Pte Ltd:

(a) that Target Company's audited balance sheet (« *bilan* ») and profit and loss accounts (« *compte de résultat* ») (together with the notes attached thereto) as of December 31, 2014, prepared in accordance with French GAAP and certified by that Target Company's statutory auditor(s),

(b) the unaudited balance sheet (« *bilan* ») and profit and loss accounts (« *compte de résultat* ») as of the Reference Date prepared in accordance with French GAAP of that Target Company's principal place of business, and

(c) the unaudited balance sheet (« *bilan* ») and profit and loss accounts (« *compte de résultat* ») as of the Reference Date prepared in accordance with French GAAP of that Target Company's branch located in Taiwan;

(D) with respect to Thomson Video Networks India Private Limited:

(a) that Target Company's audited balance sheet (« *bilan* ») and profit and loss accounts (« *compte de résultat* ») (together with the notes attached thereto) as of March 31, 2014, prepared in accordance with French GAAP and certified by that Target Company's statutory auditor(s), and

(b) that Target Company's unaudited balance sheet (« *bilan* ») and profit and loss accounts (« *compte de résultat* ») as of the Reference Date prepared in accordance with French GAAP;

(E) with respect to each of Thomson Video Networks Italia Srl, Thomson Video Networks Espana S.L. and Thomson Video Networks do Brasil Ltda, that Target Company's unaudited balance sheet (« *bilan* ») and profit and loss accounts (« *compte de résultat* ») as of December 31, 2014 and as of the Reference Date prepared in accordance with French GAAP; and

(F) with respect to each of the Holding and ManCo, that Target Company's unaudited balance sheet (« *bilan* ») and profit and loss accounts (« *compte de résultat* ») as of December 31, 2014 and as of the Reference Date prepared by PricewaterhouseCoopers in accordance with French GAAP.

"**Acquisition Proposal**" has the meaning ascribed to it in Section 5.13.

"**Additional Price**" has the meaning ascribed to it in Section 2.2.2.

"**Adjusted Initial Price**" has the meaning ascribed to it in Section 2.2.1.

"**Adjusted Final Price**" shall mean the Final Price less the portion of the Adjusted Initial Price corresponding to the purchase of any and all the Mezzanine Bonds for an amount equal to the amount of the Mezzanine Debt, as converted from Euros into US Dollars by using the Closing Exchange Rate.

"**Affiliates**"	when used with reference to a specified Person, shall mean any other Person that directly or indirectly through one or more intermediaries controls, is controlled by, controlling or is under common control with, such specified Person; for the purpose of this definition, control has the meaning set forth in Article L. 233-3 of the French Commercial Code (*Code de commerce*); it being specified that a fund shall be deemed controlled by the company managing or advising such fund.
"**Agreement**"	has the meaning ascribed to it in the Preamble.
"**Allocable Fraction**"	when used with respect to a Seller, shall mean the fraction having for numerator, the portion of the Adjusted Final Price allocated to the Transferred Securities other than the Mezzanine Bonds (if any) owned by such Seller in accordance with Section 2.9, and for denominator, the Adjusted Final Price, except that in relation to any Claim made by the Purchaser hereunder that (i) a Seller has breached any of its representations or warranties set forth in Section 8.1, such fraction shall be deemed to be equal to one (1) and (ii) a ManCo Shareholder has breached any of the representations or warranties set forth in Section 8.3, such fraction shall instead be a fraction (the "**Allocable ManCo Fraction**") having for numerator, the number of ManCo Shares held by such ManCo Shareholder at the Closing and (y) for denominator, the total number of outstanding ManCo Shares.
"**Allocable ManCo Fraction**"	has the meaning ascribed to it in the definition of Allocable Fraction.
"**Amendment to the Patent Sublicense Agreement**"	has the meaning ascribed to it in Section 4.3(a)(xxi).
"**Amount in Escrow**"	has the meaning ascribed to it in Section 2.4.
"**Assignment of Patent Rights**"	shall mean the assignment of patent rights document, the form of which is attached as Exhibit D to the IP Agreement.
"**Average Standard Margin**"	shall mean the difference between (A) 100% and (B) the fraction having for numerator, the standard Thomson branded products costs and for denominator, the total Thomson branded products net revenues (it being specified, for the avoidance of doubt, that commission fees to sales personnel shall not be part of the calculation of the Average Standard Margin for purposes of this Agreement). The Average Standard Margin shall be calculated exclusively in accordance with the example of calculation set out in **Schedule 1.1(F) – Average Standard Margin**.
"**Backlog Adjustment**"	has the meaning ascribed to it in Section 2.7.2(a).

"**Backlog Adjustment Statement**" has the meaning ascribed to it in Section 2.7.2(a).

"**Bankruptcy Proceedings**" shall mean a "*procédure d'alerte*", "*mandat ad hoc*", "*conciliation*", "*procédure de sauvegarde*", "*procédure de sauvegarde accelérée*", "*procédure de sauvegarde financière accelérée*", "*redressement judiciaire*", "*liquidation judiciaire*", "*suspension provisoire des poursuites*", "*cessation des paiements*", or voluntary reorganization or any similar proceedings under applicable Laws in any competent jurisdiction.

"**Business Day**" shall mean every day except Saturdays, Sundays and statutory holidays in Paris, France, and in San Jose, California, United States of America, on which commercial banking institutions are open for ordinary banking business in Paris and San Jose.

"**Cash**" shall mean, with respect to the Group Companies (on an aggregated basis), as at the close of business on the Closing Date (but without taking into account the consummation of the transaction contemplated hereby), cash plus the positive balance of any bank accounts, other cash accounts, cash deposit accounts, current asset investments and readily marketable Securities (such items (including cash), the "**Cash Items**"), calculated exclusively in accordance with **Schedule 1.1(A) – Cash**. For the avoidance of doubt, "Cash" (i) shall be calculated net of issued but uncleared checks and drafts, (ii) shall include checks, other wire transfers and drafts deposited or available for deposit for the account of the Group Companies and (iii) shall exclude all amounts funded by the Purchaser or any of its Affiliates to the Group Companies at or after the Closing, as the case may be.

Notwithstanding the foregoing and in accordance with what is mentioned in **Schedule 1.1(A) – Cash**, for the purposes of this definition of "Cash":

- an amount corresponding to any sums paid by the Group Companies on or prior to the Closing Date in relation to the preparation, audit and delivery to the Purchaser of the Required Financials shall be added to the total amount corresponding to the sum of all Cash Items; and
- an amount corresponding to 50% of the net amount of the "CIR" and "CICE" Tax credits (*i.e.*, of the R&D Tax credit and of the Tax credit for competitiveness and employment) shall be added to the total amount corresponding to the sum of all Cash Items.

For the avoidance of doubt, it is expressly specified that any payment made on the Closing Date by the Group Companies in relation to the IP Recovery (including the payment of the Transfer Price, as defined under the IP Agreement) shall, unlike any such payment that would be made prior to the Closing Date, not be taken into account for the purposes of this definition of "Cash" (and shall, if necessary, be neutralized for the purposes of the determination of the total amount of "Cash"), since any such payment made on the Closing Date is already taken into account in the definition of "Debt" (by being expressly included as a "Debt" item); there shall be no double counting.

"**Claim**"	has the meaning ascribed to it in Section 9.4.
"**Claim Notice**"	has the meaning ascribed to it in Section 9.4.
"**Closing**"	shall mean the completion of the sale and purchase of the Transferred Securities and the transfer of ownership (*transfert de propriété*) of the Transferred Securities to the Purchaser pursuant to Section 4.
"**Closing Accounts**"	shall mean (i) the unaudited combined balance sheet (« *bilan* ») and profit and loss accounts (« *compte de résultat* ») of the Group Companies as of the Closing Date and (ii) the unaudited balance sheet (« *bilan* ») and profit and loss accounts (« *compte de résultat* ») of ManCo as of the Closing Date, prepared in accordance with the Closing Accounts Accounting Principles.
"**Closing Accounts Accounting Principles**"	shall mean (i) the specific policies, conventions and assumptions set out in **Schedule 1.1(B) – Specific Principles** and (ii) to the extent not covered by (i), French GAAP.
"**Closing Date**"	has the meaning ascribed to it in Section 4.1.
"**Closing Exchange Rate**"	shall mean the foreign exchange rate of Euros converted into US Dollars as at the Closing Date, as determined on the basis of the Euro foreign exchange reference rate of the European Central Bank as updated by 3 p.m. C.E.T. on the Closing Date.
"**Closing Average Exchange Rate**"	shall mean the average between the foreign exchange rate of Euros converted into US Dollars as of August 10, 2015 and the foreign exchange rate of Euros converted into US Dollars as at the Closing Date, as determined on the basis of the Euro foreign exchange reference rate of the European Central Bank as updated by 3 p.m. C.E.T. on, respectively, August 10, 2015 and the Closing Date.
"**Closing Payments**"	has the meaning ascribed to it in Section 4.2.
"**CM-CIC Private Debt**"	has the meaning ascribed to it in the Preamble.
"**Collective Agreements**"	has the meaning ascribed to it in Section 8.2.17(c).
"**Company**"	has the meaning ascribed to it in Paragraph D of the Recitals.
"**Conditions Precedent**"	has the meaning ascribed to it in Section 3.1.
"**Confidentiality Agreement**"	shall mean the mutual non-disclosure agreement entered into on January 19, 2015 by and between an Affiliate of the Purchaser (in its name and in the name and on behalf of its Affiliates (as defined thereunder)) and TVN (in its name and in the name and on behalf of its Affiliates (as defined thereunder)).

"**Connected Persons**"	when used with reference to a specified Person, shall mean the general partners, agents, directors, employees, representatives, auditors and advisors of such specified Person.
"**Consolidated Net Result**"	shall mean the operating result +/- financial result +/- non-current result + taxes. All aggregates are calculated excluding one-off costs. It is calculated in accordance with French GAAP and on a basis consistent with **Schedule 1.1(C) – Gross Margin and Consolidated Net Result**.
"**Contract**"	shall mean any written or oral contract, agreement, obligation, promise, commitment or other undertaking.
"**Data Room**"	has the meaning ascribed to it in Paragraph G of the Recitals.
"**Debt**"	shall mean the aggregation of the combined liabilities for the Group Companies existing as at the close of business on the Closing Date (but without taking into account the consummation of the transaction contemplated hereby), prepared in accordance with the Closing Accounts Accounting Principles and calculated exclusively in accordance with **Schedule 1.1(D) – Debt**. Notwithstanding the foregoing and in accordance with what is mentioned in **Schedule 1.1(D) – Debt**, for the purposes of this definition of "Debt": - any payment made on the Closing Date by the Group Companies in relation to the IP Recovery (including the payment of the Transfer Price, as defined under the IP Agreement), as well as any outstanding and unpaid amounts owing as at the Closing Date by the Group Companies in relation to the IP Recovery (including, for the avoidance of doubt, the cost of any formalities, registrations and measures required by applicable Laws to operate or benefit of the IP Recovery and any reasonable attorney and consultants fees, costs and other expenses incurred in relation to such formalities, registrations and measures), as the case may be, shall be included; - any payment made on the Closing Date by the Group Companies in relation to the redemption of TVN ORANs, as the case may be, as well as any outstanding and unpaid amounts owing as at the Closing Date by the Group Companies in relation to the redemption of TVN ORANs, as the case may be, shall be included; - any outstanding and unpaid sums owing as at the Closing Date (after deduction of any payment made on the Closing Date, as the case may be) by the Group Companies in relation to the preparation, audit and delivery to the Purchaser of the Required Financials shall be excluded; and - any outstanding and unpaid sums owing as at the Closing Date by the Group Companies pursuant to the terms and conditions of the OBSAs, of the OCRs and of the ORAs shall be excluded.

"**Disclosure Schedules**"	shall mean, with respect to any representation and warranty made by the relevant Sellers under Section 8, the Schedules (i) expressly referring to such representation and warranty through a specific reference to the corresponding number of Subsection of Section 8 and letter of Paragraph of such Subsection and (ii) stating that it is an exception to such representation and warranty.
"**Disputed Items**"	has the meaning ascribed to it in Section 2.5.2.
"**Downward Adjustment**"	has the meaning ascribed to it in Section 2.6.
"**EDRIP**"	has the meaning ascribed to it in the Preamble.
"**Encumbrances**"	shall mean any mortgage, blocking lien or blocking encumbrance such as an exclusive license, a pick right, or a first to buy option, or other blocking restriction on use, exploitation or transfer.
"**Entity**"	shall mean any corporation, company (*société*), partnership (limited or general), joint venture, trust, association, economic interest group (*groupement d'intérêt économique*) or other organization, enterprise or entity, whether or not vested with the attributes of a legal person (*personne morale*).
"**Enterprise Value**"	has the meaning ascribed to it in Section 2.2.1.
"**Environmental Laws**"	shall mean all applicable Laws relating to environmental protection (including protection of air, water, soil and sub-soil, hygiene and public health, noise or protection of properties and individual safety (*sécurité des biens et des personnes*)), and the provisions of the French Civil Code relating to liability for one's own account (*responsabilité du fait personnel*), on account of a third party (*responsabilité du fait des tiers*), on account of goods (*responsabilité du fait des choses*) and for nuisances (*troubles du voisinag*e), as such Laws are applicable to any Group Company on or prior to the Closing Date.
"**Escrow Account**"	shall have the meaning ascribed to it under the Escrow Agreement.
"**Escrow Agreement**"	has the meaning ascribed to it in Section 4.3(a)(viii).
"**Escrow Closing Average Exchange Rate**"	shall mean (A) one (1), divided by (B) the Closing Average Exchange Rate.
"**Escrow Closing Exchange Rate**"	shall mean (A) one (1), divided by (B) the Closing Exchange Rate.
"**Escrow Pre-Closing Exchange Rate**"	shall mean (A) one (1), divided by (B) the Pre-Closing Exchange Rate.

"**Estimated Amounts**"	has the meaning ascribed to it in Section 5.8.
"**Estimated Cash**"	shall mean the Cash as of the Closing Date as estimated in good faith by the Sellers for the purpose of determining the Estimated Initial Price and reviewed by the Purchaser in accordance with Section 5.8.
"**Estimated Debt**"	shall mean the Debt as of the Closing Date as estimated in good faith by the Sellers for the purpose of determining the Estimated Initial Price and reviewed by the Purchaser in accordance with Section 5.8.
"**Estimated Initial Price**"	has the meaning ascribed to it in Section 2.3.
"**Estimated ManCo Cash**"	shall mean the ManCo Cash as of the Closing Date as estimated in good faith by the Sellers for the purpose of determining the Estimated Initial Price and reviewed by the Purchaser in accordance with Section 5.8.
"**Estimated ManCo Debt**"	shall mean the ManCo Debt as of the Closing Date as estimated in good faith by the Sellers for the purpose of determining the Estimated Initial Price and reviewed by the Purchaser in accordance with Section 5.8.
"**Estimated ManCo Net Cash**"	shall mean Estimated ManCo Cash minus Estimated ManCo Debt.
"**Estimated ManCo Normative Working Capital**"	shall mean the ManCo Normative Working Capital as of the Closing Date as estimated in good faith by the Sellers on the basis of the Estimated ManCo Working Capital for the purpose of determining the Estimated Initial Price and reviewed by the Purchaser in accordance with Section 5.8.
"**Estimated ManCo Working Capital**"	shall mean the ManCo Working Capital as of the Closing Date as estimated in good faith by the Sellers for the purpose of determining the Estimated Initial Price and reviewed by the Purchaser in accordance with Section 5.8.
"**Estimated ManCo Working Capital Adjustment**"	shall mean Estimated ManCo Working Capital minus Estimated ManCo Normative Working Capital.
"**Estimated Net Cash**"	shall mean Estimated Cash minus Estimated Debt.
"**Estimated Normative Working Capital**"	shall mean the Normative Working Capital as of the Closing Date as estimated in good faith by the Sellers on the basis of the Estimated Working Capital for the purpose of determining the Estimated Initial Price and reviewed by the Purchaser in accordance with Section 5.8.
"**Estimated Working Capital**"	shall mean the Working Capital as of the Closing Date as estimated in good faith by the Sellers for the purpose of determining the Estimated Initial Price and reviewed by the Purchaser in accordance with Section 5.8.

"**Estimated Working Capital Adjustment**"	shall mean Estimated Working Capital minus Estimated Normative Working Capital.
"**Existing Holding Shareholders' Agreement**"	shall mean the shareholders' agreement entered into on October 17, 2014 by and between the direct and indirect holders of Securities issued by the Holding (including ManCo and its shareholders) as amended from time to time.
"**Existing Indebtedness**"	shall mean all outstanding and unpaid amounts owing as at the Closing Date (in principal, interest, penalties and any other sums) by the Target Companies pursuant to, or in connection with, the Existing Loan Agreements (including, without limitation, all breakage costs (if any) due in connection with the voluntary prepayment of any sums due by the Target Companies pursuant to, or in connection with the Existing Loan Agreements), as determined in accordance with the terms of the Existing Loan Agreements.
"**Existing Inter-Creditors' Agreement**"	has the meaning ascribed to it in Section 4.3(a)(xviii).
"Existing Loan Agreements"	- the shareholder's loan agreement dated January 21, 2015 entered into by and between Kepler M2 and Mr. Delahousse, pursuant to which a loan of €1,080 has been granted by Mr. Delahousse to Kepler M2; - the shareholder's loan agreement dated January 21, 2015 entered into by and between Kepler M2 and Mr. Congard, pursuant to which a loan of €1,060 has been granted by Mr. Congard to Kepler M2; - the shareholder's loan agreement dated January 21, 2015 entered into by and between Kepler M2 and Mr. Louvet, pursuant to which a loan of €790 has been granted by Mr. Louvet to Kepler M2; - the shareholder's loan agreement dated January 21, 2015 entered into by and between Kepler M2 and Mr. Gallier, pursuant to which a loan of €710 has been granted by Mr. Gallier to Kepler M2; - the shareholder's loan agreement dated January 21, 2015 entered into by and between Kepler M2 and Mr. Guiot, pursuant to which a loan of €440 has been granted by Mr. Guiot to Kepler M2; - the shareholder's loan agreement dated January 21, 2015 entered into by and between Kepler M2 and Mr. Perron, pursuant to which a loan of €440 has been granted by Mr. Perron to Kepler M2; - the shareholder's loan agreement dated January 21, 2015 entered into by and between Kepler M2 and Mrs. Trevisan-Jallu, pursuant to which a loan of €400 has been granted by Mrs. Trevisan-Jallu to Kepler M2;

“**Existing Loan Agreements**”

- the shareholder’s loan agreement dated March 31, 2015 entered into by and between Kepler M2 and Mr. Procureur, pursuant to which a loan of €290 has been granted by Mr. Procureur to Kepler M2;
- the shareholder’s loan agreement dated March 31, 2015 entered into by and between Kepler M2 and Mrs. Sauvion, pursuant to which a loan of €60 has been granted by Mrs. Sauvion to Kepler M2;
- the shareholder’s loan agreement dated October 20, 2015 entered into by and between Kepler M2 and Mr. Delahousse, pursuant to which a loan of €413 has been granted by Mr. Delahousse to Kepler M2;
- the shareholder’s loan agreement dated October 20, 2015 entered into by and between Kepler M2 and Mr. Congard, pursuant to which a loan of €404 has been granted by Mr. Congard to Kepler M2;
- the shareholder’s loan agreement dated October 20, 2015 entered into by and between Kepler M2 and Mr. Louvet, pursuant to which a loan of €299 has been granted by Mr. Louvet to Kepler M2;
- the shareholder’s loan agreement dated October 20, 2015 entered into by and between Kepler M2 and Mr. Gallier, pursuant to which a loan of €268 has been granted by Mr. Gallier to Kepler M2;
- the shareholder’s loan agreement dated October 20, 2015 entered into by and between Kepler M2 and Mr. Guiot, pursuant to which a loan of €166 has been granted by Mr. Guiot to Kepler M2;
- the shareholder’s loan agreement dated October 20, 2015 entered into by and between Kepler M2 and Mr. Perron, pursuant to which a loan of €166 has been granted by Mr. Perron to Kepler M2;
- the shareholder’s loan agreement dated October 20, 2015 entered into by and between Kepler M2 and Mrs. Trevisan-Jallu, pursuant to which a loan of €152 has been granted by Mrs. Trevisan-Jallu to Kepler M2;
- the shareholder’s loan agreement dated October 20, 2015 entered into by and between Kepler M2 and Mr. Procureur, pursuant to which a loan of €110 has been granted by Mr. Procureur to Kepler M2; and
- the shareholder’s loan agreement dated October 20, 2015 entered into by and between Kepler M2 and Mrs. Sauvion, pursuant to which a loan of €22 has been granted by Mrs. Sauvion to Kepler M2.

“**Existing Shareholders’ Documents**”	shall mean, collectively, the Existing Loan Agreements, the Existing Holding Shareholders’ Agreement and any agreement made among Sellers and/or Kepler M2 restricting in any way the free transfer of the Transferred Securities.
“**FB Held Patent Rights**”	shall mean any and all (i) Patents owned, held, developed, or acquired by assignment, by France Brevets further to the substituting Kepler in the PAA Agreement by exercising pursuant to the PLA1 Agreement the substitution faculty provided in the PAA Agreement, (ii) Patents filed in the name of France Brevets or any of France Brevets Affiliates, based on inventions originating from any of the Group Companies, and (iii) rights to inventions originating from any of the Group Companies and held by France Brevets or any of France Brevets Affiliates pursuant to a transfer of rights from any of the Group Companies to France Brevets or any of France Brevets Affiliates, (iv) however excluding, in any of (i) and (ii), (A) any and all Patents which France Brevets sold, assigned, transferred or conveyed unto Persons other than any of the Group Companies or France Brevets Affiliates, and (B) any and all Patents which France Brevets agreed and undertook to sell, assign, transfer or convey unto Persons other than any of the Group Companies or France Brevets Affiliates, for each of (i), (ii), (iii), and (iv), prior to the transfer of FB Held Patent Rights pursuant to the IP Agreement.
“**Final Price**”	has the meaning ascribed to it in Section 2.2.
“**Financière Kepler**”	has the meaning ascribed to it in Paragraph A of the Recitals.
“**Firm**”	has the meaning ascribed to it in Section 2.5.3.
“**FMEF Clearance**”	shall mean the obtaining of (i) a foreign investment prior authorization, without any conditions, obligations or requirements, from the French Ministry for the Economy and Finance in accordance with the French decree no. 2014-479 dated 14 May 2014 and the provisions of articles L. 151-1 et seq. and R. 153-1 et seq. of the French monetary and financial code; or (ii) a letter from the French Minister of Economy and Finance indicating that the activity of the Group Companies does not fall under the scope of the provisions of article L. 151-3 of the French monetary and financial code and that accordingly, the contemplated Transaction is exempted from the obtaining of the foreign investment prior authorization required by articles L. 151-1 et seq. and R. 153-1 et seq. of the same code; or (iii) any implicit authorization, if the French Minister of Economy and Finance fails to reply within two (2) months as of the day when the French Minister of Economy and Finance judges that the information delivered to it by the Purchaser for the authorization-making process is sufficient.
“**FPCI Winch Capital 3**”	has the meaning ascribed to it in the Preamble.
“**FPCI CIC Mezzanine 3**”	has the meaning ascribed to it in the Preamble.
“**France Brevets**”	shall mean France Brevets, a company (*société par actions simplifiée*) organized under the laws of France, having a share capital of €90,000,000 and its registered office at 47, rue de la Victoire, 75009 Paris (France), registered with the French Registry of Commerce and Companies under number 531 129 195 RCS Paris.

"**France Brevets Affiliates**"	shall mean any Affiliates of France Brevets including any Entity of the Caisse des Dépôts et Consignations group specialized in intellectual property management.
"**French GAAP**"	shall mean the accounting rules, methods and principles generally accepted in France which were applicable at the Reference Date.
"**Governmental Authority**"	shall mean any court or government (federal, state, local, national, foreign, provincial or supranational) or any political subdivision thereof, including, without limitation, any department, commission, ministry, board, bureau, agency, authority, tribunal or arbitral body, exercising executive, legislative, judicial, regulatory or administrative authority, including any self-regulatory authority or quasi-governmental entity established to perform any of these functions.
"**Governmental Authorization**"	shall mean any approval, declaration, consent, permit, ruling, waiver, exemption or other authorization (including the lapse, without objection, of a prescribed time under a statute or regulation that states that a transaction may be implemented if a prescribed time lapses following the giving of notice without an objection being made) issued, granted, given or otherwise made available by or under the authority of any Governmental Authority or pursuant to any Law.
"**Gross Margin**"	shall mean (A) the difference between (a) total sales less (b) costs of goods sold (COGS), divided by (B) total sales. Cost of goods sold (COGS) relates to direct costs associated to production of goods sold and include the cost of the materials or third parties equipment as well as direct labors costs (manufacturing, competence center, field services), transport & custom duties, commercial fees, prototypes, costs of subcontractor for integration, price material variances, inventory depreciation and costs for specific feature development. It is calculated in accordance with French GAAP and on a basis consistent with **Schedule 1.1(C) – Gross Margin and Consolidated Net Result**.
"**Group Companies**" or "**Group Company**"	has the meaning ascribed to it in Paragraph F of the Recitals.
"**Group Companies Agreements**"	has the meaning ascribed to it in Section 8.2.12(a).
"**Group Companies Intellectual Property**"	shall mean (i) any and all Intellectual Property Rights owned, held, developed, or acquired by assignment, by any of the Group Companies, and (ii) FB Held Patent Rights.
"**Group Companies Product**" or "**Group Companies Products and Services**"	shall mean all products, systems and services sold or offered for sale by any of the Group Companies.

"**Group Companies Technology**"	shall mean any and all Technology owned, held, developed, or acquired by assignment, by any of the Group Companies.
"**Guarantee**"	shall mean any guarantee, joint undertaking (*caution, aval*), comfort letter, letter of credit, or any obligation, whether actual or contingent, to guarantee the repayment of or assume any Indebtedness of any Person or pertaining, directly or indirectly, to maintain the ability of a Person to meet any of its Indebtedness.
"**Guaranteed Obligations**"	has the meaning ascribed to it in Section 11.4.
"**Harmful Code**"	shall mean any program, routine, device or other feature, such as but not limited to any "back door," "drop dead device," "Trojan Horse," "virus," "worm," "spyware," or "adware" (as such terms are commonly understood in the software industry) or any other code designed or intended to have, or capable of performing or facilitating, any of the following functions: (i) disrupting, disabling, harming, or otherwise impeding in any manner the operation of, or providing unauthorized access to, a computer system or network or other device on which such code is stored or installed; or (ii) compromising the privacy or data security of a user or damaging or destroying any data or file without the user's consent.
"**Holding**"	has the meaning ascribed to it in Paragraph A of the Recitals.
"**Holding Shares**"	shall mean, collectively, the Ordinary Shares and the New Ordinary Shares.
"**Indebtedness**"	shall mean any debt or other obligation (whether incurred jointly, severally as principal or as surety or in any other capacity whatsoever) for the payment or repayment of money borrowed, whether present or future, actual or contingent.
"**Indemnifying Sellers**"	shall mean all the Sellers except Montalivet Networks.
"**Initial Price Adjustment**"	shall mean the difference between the Adjusted Initial Price as resulting from the Purchaser Completion Statement and the Estimated Initial Price.
"**IP Agreement**"	shall mean the agreement dated December 9, 2015 entered into by and between France Brevets and Kepler, the final draft of which is attached hereto as **Schedule 1.1(G) – IP Agreement**.
"**IP Recovery**"	shall mean the transfer and conveyance to Kepler or its Designated Transferee (as defined under the IP Agreement) of all rights, title and interest France Brevets and France Brevets Affiliates have in and to FB Held Patent Rights, including any Abandoned Patents in the FB Held Patent Rights, pursuant to the IP Agreement and the Assignment of Patent Rights, upon full payment by Kepler of the Transfer Price (as defined under the IP Agreement).
"**IP Substitution Notice**"	shall mean any notice served by the Purchaser to the Sellers' Representative to substitute any Entity, the corporate name, registered office and, if applicable, registration number of which shall be indicated in the notice, for Kepler for the purpose of the completion of the IP Recovery.

"**Intellectual Property Rights**"	shall mean (i) inventions, whether or not patented or patentable, reduced to practice or made the subject of one or more pending patent applications, and all improvements thereto, (ii) patent rights, patents and patent applications (including all extensions, divisions, renewals, reissues, substitutions, continuations, continuations-in-part, and reexaminations thereof) registered or applied for in France and all other nations throughout the world, (iii) trademarks, service marks, trade dress, logos, slogans, trade names and corporate names (whether or not registered in France and all other nations throughout the world), including all variations, derivations, combinations, registrations and applications for registration or renewals of the foregoing and all goodwill associated therewith, (iv) copyrights and rights under copyrights (in both published and unpublished works, whether or not registered) and registrations and applications for registration or renewals thereof, including without limitation all compilations, and Software (including all underlying and related source and object codes), manuals and other documentation, and all derivative works, translations, adaptations, and combinations of the above, regardless of the medium of fixation or means of expression, (v) mask work rights and registrations and applications for registration or renewals thereof, (vi) trade secrets and, whether or not confidential, business information (including pricing and cost information, business and marketing plans and customer and supplier lists), technology and know-how (including manufacturing and production processes and techniques and research and development information), (vii) industrial designs (whether or not registered), (viii) rights in databases (including *sui generis* rights in databases) and data collections (including knowledge databases, customer lists and customer databases), whether registered or unregistered, and any applications for registration therefor, (ix) domain names, URL and domain name registrations, (x) all rights in all of the foregoing provided by treaties, conventions and common law, (xi) all rights to sue or recover and retain damages and costs and attorneys' fees for past, present and future infringement or misappropriation of any of the foregoing, and (xii) other proprietary or intellectual property rights now known or hereafter recognized in any jurisdiction.
"**Insurance Policies**"	has the meaning ascribed to it in Section 8.2.15.
"**Inventory**"	means the goods (semi-finished goods, finished goods, or residual goods), merchandise, supplies, works in process and raw materials.
"**Judgment**"	shall mean any award, decision, injunction, judgment, order or ruling entered, issued, made or rendered by any Governmental Authority or by any arbitrator enforceable as of the relevant date.
"**Kepler**"	has the meaning ascribed to it in Paragraph D of the Recitals.
"**Kepler M2**"	has the meaning ascribed to it in the Preamble.

"**Key Employees**"	shall mean Claude Perron, Eric Louvet, Christophe Cailteaux, Crystele Trevisan, Delphine Sauvion, Eric Gallier, Jean- Marie Guiot, Marc Procureur, Christophe Delahousse and Hervé Congard.
"**Law**"	shall mean any law, statute, regulation, rule, ordinance, principle of common law, order, decree or Judgment of any Governmental Authority (including any judicial or administrative interpretation thereof) in force, fully implemented and enforceable as of the relevant date (including any SEC requirements and NASDAQ rules).
"**Leased Personal Properties**"	has the meaning ascribed to it in Section 8.2.8(c).
"**Liens**"	shall mean any pledge of real or personal property (*nantissement* or *gage*), mortgage (*hypothèque*), lien (*privilège*), right of retention (*droit de rétention*), charge (*charge*), ownership right (*démembrement*), easement or right of way (*servitude*), joint possession (*indivision*), dismemberment of the right of ownership (*démembrement de propriété*), pre-emptive rights, options, or other security (*sûreté*) or similar third-party rights which has the purpose or the effect of restricting the ownership, the use or the transferability of the relevant asset or security (excluding, for the avoidance of doubt, any pledge, lien, right, charge or other security created or granted by the Purchaser or any of its Affiliates).
"**Long Stop Date**"	shall mean July 29, 2016.
"**Loss**"	shall mean any and all claims (*préjudices*), losses (*pertes*), damages, liabilities, Judgments, fines, penalties, interest, costs, expenses and disbursements (including any reasonable attorney, accountant and consultant fees, costs and other expenses incurred in connection with the investigation, collection, prosecution, defense, compromise and settlement of any action, suit, proceeding or claim (including, for the avoidance of doubt, in connection with any proceedings initiated in order to obtain payment of a Refund under Section 9)) suffered or incurred by the Purchaser, its Affiliates or any of the Target Companies (including, for the avoidance of doubt, any reduction or decrease of any relief, allowance, deduction or Tax credit), <u>provided</u> that a Loss shall qualify as "*préjudice direct*" under French Law.
"**Manager**"	as to any Entity, shall mean the representatives (*mandataires sociaux*) (including the chairmen (*présidents*), directors and members of the board (*administrateurs et membres du Directoire*), managers (*gérants*), executive officers, managing directors (*directeurs généraux*) and delegate managing directors (*directeurs généraux délégués*) as well as members of the supervisory board.
"**ManCo**"	has the meaning ascribed to it in the Preamble.

"**ManCo Cash**"	shall mean, with respect to ManCo, as at the close of business on the Closing Date (without taking into account the consummation of the transaction contemplated hereby), cash plus the positive balance of any bank accounts, other cash accounts, cash deposit accounts, current asset investments and readily marketable Securities, calculated exclusively in accordance with **Schedule 1.1(E) – ManCo Cash – ManCo Debt – ManCo Working Capital**. For the avoidance of doubt, ManCo Cash (i) shall be calculated net of issued but uncleared checks and drafts, (ii) shall include checks, other wire transfers and drafts deposited or available for deposit for the account of ManCo and (iii) shall exclude all amounts funded by the Purchaser or any of its Affiliates to ManCo at or after the Closing, as the case may be.
"**ManCo Debt**"	shall mean the aggregate amount of financial liabilities and indebtedness of ManCo existing as at the close of business on the Closing Date (without taking into account the consummation of the transaction contemplated hereby), prepared in accordance with the Closing Accounts Accounting Principles and calculated exclusively in accordance with **Schedule 1.1(E) – ManCo Cash – ManCo Debt – ManCo Working Capital**.
"**ManCo Net Cash**"	shall mean ManCo Cash minus ManCo Debt.
"**ManCo Normative Working Capital**"	shall mean the average of the ManCo Working Capital calculated monthly over the last twelve (12) months prior to the Closing Date.
"**ManCo Shares**"	means the outstanding 3,635,805 ordinary shares (*actions ordinaires*), nominal value €1, in the share capital of ManCo.
"**ManCo Shareholders**"	means the Sellers which will sell ManCo Shares at Closing.
"**Manco Shareholders' Knowledge**"	shall mean the actual knowledge at the date hereof of the Manco Shareholders.
"**ManCo Working Capital**"	shall mean the aggregate amount (positive or negative) as calculated by deducting the current liabilities of ManCo required to be reflected on the face of a balance sheet prepared in accordance with the Closing Accounts Accounting Principles (such current liabilities excluding any amount already included in the ManCo Debt) as at close of business on the date as of which it is calculated (but without taking into account the consummation of the transaction contemplated hereby when such date is the Closing Date), from the current assets of ManCo required to be reflected on the face of a balance sheet prepared in accordance with the Closing Accounts Accounting Principles (such current assets excluding ManCo Cash) as at close of business on the date as of which it is calculated (but without taking into account the consummation of the transaction contemplated hereby when such date is the Closing Date), as calculated in accordance with **Schedule 1.1(E) – ManCo Cash – ManCo Debt – ManCo Working Capital**.

"**ManCo Working Capital Adjustment**"	shall mean ManCo Working Capital as of the Closing Date minus ManCo Normative Working Capital as of the Closing Date.
"**Material Adverse Change**"	shall mean any event, change, occurrence, circumstance, effect, state of affairs or fact (an "**Event**") which individually or together with any one or more other Events, has or could reasonably be expected to result in a material adverse effect on the business, assets, operations, activities, liabilities (including contingent liabilities), properties, conditions (financial or otherwise), results of operations of the Target Companies, taken as a whole, provided, however, that such Material Adverse Change shall not include (i) any failure of any of the Target Companies to meet its internal earnings, revenues or other projections or forecasts (it being understood and agreed that any Event giving rise to such failure shall be taken into account in determining whether there has been a Material Adverse Change), (ii) an Event generally affecting the industry in which the Target Companies operate, (iii) any change in the French or global economy, or capital, financial or Securities markets generally, including changes in interest or exchange rates, (iv) any change in law or regulation in the geographic regions in which the Target Companies do business, (v) any act of war or of terrorism outside of the geographic regions in which the Target Companies do business, (vi) any action taken at the written request of the Purchaser or pursuant to this Agreement, (vii) earthquakes, hurricanes or other natural disasters outside of the geographic regions in which the Target Companies do business, (viii) any damage or destruction of any Target Company's property that is substantially covered and indemnified by insurance, provided such Event in the case of each of the clauses (ii), (iii), (iv), (v), (vi), (vii) and (viii) do not materially or disproportionately affect the Target Companies, taken as a whole, relative to other participants in the industry in which the Target Companies operate. However, it is agreed that the Friday November 13th Paris terrorist events do not constitute an "Event" for the purpose of the "Material Adverse Change" definition.
"**Material Contracts**"	shall mean any Contracts (including, for the avoidance of doubt, purchase orders) in full force and effect to which any Group Company is a party entered into with any of the one hundred eleven (111) largest customers of the Group Companies on the basis of the Accounts and representing, together with other Contracts entered into with any of the one hundred eleven (111) largest customers of the Group Companies on the basis of the Accounts, 80% of the combined revenues of the Group Companies as set out in the Accounts.
"**Mezzanine Bonds**"	shall mean the outstanding 50 bonds (*obligations*) issued by the Holding on October 17, 2014 in the aggregate principal amount of €5,000,000, and fully subscribed and paid up on the same date, to which were originally attached the Mezzanine Warrants.

"**Mezzanine Debt**"	shall mean all outstanding and unpaid amounts owing as at the Closing Date (in principal, interest, penalties and any other sums) by the Holding pursuant to, or in connection with, the terms and conditions of the Mezzanine Bonds (*modalités des obligations*), as determined in accordance with the terms and conditions of the Mezzanine Bonds (*modalités des obligations*).
"**Mezzanine Warrants**"	shall mean, collectively, the outstanding 623,600 mezzanine warrants A and the outstanding 340,400 mezzanine warrants B originally attached to the Mezzanine Bonds.
"**Montalivet Networks**"	has the meaning ascribed to it in the Preamble.
"**Mother Company**"	has the meaning ascribed to it in the Preamble.
"**Mother Company Guarantee**"	has the meaning ascribed to it in Section 11.4.
"Net Cash"	shall mean Cash minus Debt.
"New Holding By-Laws"	has the meaning ascribed to it in Section 4.3(a)(xiii).
"New Ordinary Shares"	means the new ordinary shares (*actions ordinaires*) of the Holding to be issued prior to Closing for repayment of the ORAs in accordance with their terms and conditions, as modified pursuant to this Agreement.
"New Terms and Conditions of the OCRs"	has the meaning ascribed to it in Section 4.3(a)(xv).
"**New Terms and Conditions of the ORAs**"	has the meaning ascribed to it in Section 4.3(a)(xiv).
"**Normative Working Capital**"	shall mean the average of the Working Capital calculated monthly over the last twelve (12) months prior to the Closing Date.
"**Objection Notice**"	has the meaning ascribed to it in Section 2.5.2.
"**OBSAs**"	shall mean, collectively, the Mezzanine Bonds and the Mezzanine Warrants (whether or not still attached to the Mezzanine Bonds).
"**OCRs**"	shall mean the outstanding 6,468,118 bonds convertible into shares or redeemable in cash (*obligations convertibles en actions ou remboursables*) issued by the Holding on October 17, 2014, and fully subscribed and paid up on the same date.

"**ORAs**"	shall mean the outstanding 1,296,866 bonds redeemable in shares (*obligations remboursables en actions*) issued by the Holding on October 17, 2014, and fully subscribed and paid up on the same date, to be repaid in New Ordinary Shares prior to Closing in accordance with their terms and conditions, as modified pursuant to this Agreement.
"**Ordinary Shares**"	shall mean the outstanding 10,553,578 ordinary shares (*actions ordinaires*), nominal value €1, in the share capital of Financière Kepler.
"**Organizational Documents**"	shall mean when used with respect to (x) any company (*société*) or other incorporated Entity, the memorandum and articles of association (*statuts*), charter or similar constitutive document of such company (*société*) or other incorporated Entity, as the case may be filed with the relevant commercial registry, company registrar or other Governmental Authority, as the same may be amended, supplemented or otherwise modified from time to time, and (y) any partnership or other unincorporated Entity, its certificate of formation, partnership agreement, governing agreement (*contrat constitutif*) and/or similar constitutive document, as the same may be amended, supplemented or otherwise modified from time to time.
"**Overdue Receivables**"	has the meaning ascribed to it in Section 8.2.6(b).
"**Owned Personal Properties**"	has the meaning ascribed to it in Section 8.2.8(a).
"**PAA Agreement**"	shall mean that certain Patent Assignment Agreement dated May 3, 2011, entered into by Thomson Licensing SAS and Kepler.
"**Parties**"	has the meaning ascribed to it in the Preamble.
"**Patent**"	shall mean in any country worldwide, (i) registered patents, patent applications (including US provisional applications filed with the United States Trademark and Patent Office or USPTO), (ii) utility model rights, (iii) any patent or utility model rights that derive from any of the foregoing, (iv) published applications for any of the foregoing, (v) any reissue, re-examination, extension, renewal, continuation, continuation in part, and division of any of the foregoing; and foreign counterparts to any of the foregoing.
"**Patent Family**"	shall mean an assembly of Patents claiming or benefiting from, at least partly, the same priority under the Paris Convention, the TRIPS Agreement, the European Patent Convention, or any similar agreement.
"**PCLA**"	has the meaning ascribed to it in Section 8.2.10(t).
"**Person**"	shall mean a natural person, Entity, or Governmental Authority.

"**PLA1 Agreement**"	shall mean that certain Cooperation and Patent License Agreement Professional Head End Products, dated October 7, 2011, entered into by France Brevets and Kepler, as amended by the "Amendment to the Cooperation and Patent License Agreement Professional Head End Products", dated October 21, 2011, and by the "Amendment N°2 to the Cooperation and Patent License Agreement Professional Head End Products", dated December 31, 2014.
"**Potential Bidder**"	has the meaning ascribed to it in Section 5.13.
"**Pre-Closing Exchange Rate**"	shall mean the foreign exchange rate of Euros converted into US Dollars as at the Business Day immediately preceding the date of the Pre-Closing Statement, as determined on the basis of the Euro foreign exchange reference rate of the European Central Bank as updated by 3 p.m. C.E.T. on the Business Day immediately preceding the date of the Pre-Closing Statement.
"**Pre-Closing Statement**"	has the meaning ascribed to it in Section 5.8.
"**Proceedings**"	shall mean any action, audit, hearing, inquiry, investigation, claim, complaint, litigation, proceedings or suit (whether civil, administrative, or criminal) commenced, brought, conducted or heard by or before any Governmental Authority or arbitrator.
"**Products and Services**"	has the meaning ascribed to it in Section 8.2.20(a).
"**Product Backlog**"	shall mean all orders items for Thomson branded products including associated software registered into the Group Companies' ERP and not yet converted into revenue.
"**Publicly Available Software**"	shall mean: (A) any Software that contains, or is derived in any manner in whole or in part from, any Software that is distributed as free Software, open source Software (e.g. Linux) or under similar licensing or distribution models; or (B) any Software that may require as a condition of use, modification or distribution that such Software or other Software incorporated into, derived from or distributed with such Software: (i) be disclosed or distributed in Source Code form; (ii) be licensed for the purpose of making derivative works; or (iii) be redistributable at no charge.
"**Purchaser**"	has the meaning ascribed to it in the Preamble.
"**Purchaser Completion Statement**"	has the meaning ascribed to it in Section 2.5.1.
"**Purchaser IP Recovery**"	shall mean the transfer and conveyance to any Entity of the group controlled by the Mother Company (including, but not limited to, any Group Company) of all rights, title and interest France Brevets and France Brevets Affiliates have in and to FB Held Patent Rights, including any Abandoned Patents in the FB Held Patent Rights after the Closing Date.

"**Purchaser IP Recovery Cost and Expenses**"	shall mean any cost and expenses paid or incurred by the Purchaser or any of its Affiliates (including, but not limited to, any Group Company) in relation to the Purchaser IP Recovery (including, for the avoidance of doubt, the aggregate price in consideration thereof paid, to be paid or due to France Brevets and/or France Brevets Affiliates, as well as the cost of any formalities, registrations and measures required by applicable Laws to operate or benefit of the Purchaser IP Recovery and any reasonable attorney and consultants fees, costs and other expenses paid or incurred in relation to such formalities, registrations and measures).
"**Purchaser IP Recovery Full Completion**"	shall mean the full completion of the Purchaser IP Recovery, as well as of any and all formalities, registrations and measures required by applicable Laws to operate or benefit of the Purchaser IP Recovery.
"**Put Option Agreement**"	shall mean the put option agreement entered into on December 7, 2015 by and between, *inter alios*, the Mother Company and the Sellers.
"**Real Property**"	shall mean all real property (including land, buildings, fixtures (*immeubles par destination*) and fittings (*immeubles par incorporation*) used or occupied by each Group Company.
"**Real Property Leases**"	shall mean all leases relating to Real Property (including commercial leases, long-term leases (*baux emphytéotiques*), construction leases (*baux à construction*), financial leases (*credit-baux*)) and any other right of occupation of any Real Property benefiting to or granted by a Group Company.
"**Reference Date**"	shall mean September 30, 2015.
"**Refund**"	has the meaning ascribed to it in Section 9.1.
"**Registered IP**"	shall mean all French, international and foreign Intellectual Property Rights that have been recorded or registered in any applicable jurisdiction or is otherwise the subject of an application, certificate, filing, registration or other document issued, filed with, or recorded by any Governmental Authority, and is owned by, under obligation of assignment to, or filed in the name of, any of the Group Companies or France Brevets, including, without limitation, FB Held Patent Rights.
"**Relevant Exchange Rate**"	shall mean (A) one (1), divided by (B) the foreign exchange rate of Euros converted into the relevant foreign currency as at the Closing Date, as determined on the basis of the relevant Euro foreign exchange reference rate of the European Central Bank as updated by 3 p.m. C.E.T. on the Closing Date.
"**Remaining Purchaser IP Recovery Cost and Expenses**"	has the meaning ascribed to it in Section 3.3(d)(ii).
"**Remaining Purchaser IP Recovery Cost and Expenses Notice**"	has the meaning ascribed to it in Section 3.3(d)(ii).

"**Required Financials**"	shall mean the audited statements of income, of changes in net assets and of cash flows of Holding and ManCo for such historical annual and interim periods as may be required by Purchaser, which are needed by the Purchaser for the purpose of the satisfaction of its reporting obligations under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, and which will (i) have been prepared in accordance with the books of account and other financial records of Holding and ManCo, (ii) have been prepared in accordance with U.S. GAAP, (iii) present fairly, in all material respects, the financial condition and results of operations of Holding and ManCo as of the dates thereof and for the periods covered by such statements, (iv) be accompanied by the unqualified opinion of an internationally recognized independent accounting firm to such effect and (v) conform in all material respects to the requirements of the SEC's Regulation S-X.
"**Response**"	has the meaning ascribed to it in Section 9.4.
"**Revenues Adjustment**"	has the meaning ascribed to it in Section 2.7.1(a).
"**Revenues Adjustment Statement**"	has the meaning ascribed to it in Section 2.7.1(a).
"**Sales Representatives Independent Contractors"**	has the meaning ascribed to it in Section 8.2.14.
"**SEC**"	shall mean the United States Securities and Exchange Commission.
"**Securities**"	shall mean (i) any security, issued or to be issued, by an Entity, which may entitle its holder, directly or indirectly, immediately or in the future, to a portion of the share capital, profits, liquidation profits or voting rights of an Entity (including any share, preferred share, warrants, convertible bonds (including bonds convertible into shares or redeemable in cash), bonds redeemable (including bonds redeemable in shares and bonds redeemable in shares or in cash), bonds with warrants attached, or bonds convertible or redeemable into Transferred Securities), (ii) any preferential subscription or allotment rights relating to an issuance of such securities or (iii) any division of such securities, including into bare ownership or usufruct.
"**Sellers**"	has the meaning ascribed to it in the Preamble.
"**Sellers' Knowledge**"	shall mean the actual knowledge at the date hereof of the Parties listed 1 to 9 (included) of this Agreement.
"**Sellers' Representative**"	shall mean the Person appointed as joint representative of the Sellers for the purpose of the Agreement, pursuant to Section 11.9, namely Mr. Delahousse or any of his successors.
"**Shares**"	shall mean, collectively, the ManCo Shares and the Holding Shares (other than the Ordinary Shares held by ManCo).

"**Software**"	shall mean computer software, firmware, programs and databases in any form, including Internet web sites, web content and links, Source Code, executable code, tools, developers kits, utilities, graphical user interfaces, menus, images, icons, and forms, and all versions, updates, corrections, enhancements and modifications thereof, and all related documentation, developer notes, comments and annotations related thereto.
"**Source Code**"	shall mean any software in human readable form such as it is normally used to enable modifications to be made to it (including, but not limited to, comments and procedural code such as job control language and scripts to control compilation and installation).
"**Specific Thomson Licensing Indemnity**"	has the meaning ascribed to it in Section 8.2.10(t).
"**Specific Thomson Licensing Occurrence**"	has the meaning ascribed to it in Section 8.2.10(t).
"**Target Companies**"	shall mean, collectively, ManCo and the Group Companies.
"**Tax**" or "**Taxes**"	shall mean all forms of taxation, duties, levies, imposts and social security charges, whether direct or indirect including, without limitation, corporate income tax, wage withholding tax, national social security contributions and employee social security contributions, value added tax, customs and excise duties, capital tax and other legal transaction taxes, dividend withholding tax, land taxes, environmental taxes and duties and any other type of taxes or duties payable by virtue of any applicable national, regional or local law or regulation and which may be due directly or by virtue of joint and several liability in any relevant jurisdiction; together with any interest, penalties, surcharges or fines relating thereto, due, payable, levied, withheld, imposed upon or claimed to be owed in any relevant jurisdiction, and all amounts payable with respect to any taxes pursuant to an agreement, arrangement or any other legal obligation, including payment as a secondary liability besides or for the account of any other Person, notably profit sharing schemes (including in particular "*Participation des salariés*" and "*Intéressement*"), including interest, penalties and other charges in addition thereto.
"**Tax Authority**"	shall mean, with respect to any Taxes the authority (whether governmental or not) legally in charge of imposing, regulating, administrating and/or collecting any Taxes (including for the avoidance of doubt a social security authority).
"**Tax Returns**"	shall mean all returns, reports (including elections, declarations, statements, disclosures, claims for refunds, schedules, estimates and information returns) and other information filed or required to be filed with any Tax Authority relating to Taxes, or any specific mention or formality in a commercial document (including without limitation invoices and registers) required, including any schedule or attachment, and any amendment.

"**Technology**"	shall mean copies and tangible embodiments of Intellectual Property Rights, whether in electronic, written or other media, including Software, technical documentation, specifications, designs, bills of material, build instructions, test reports, schematics, algorithms, application programming interfaces, user interfaces, routines, formulae, test vectors, ip cores, mask works, tooling requirements, databases, lab notebooks, invention disclosures, processes, prototypes, samples, studies, or other know-how and other works of authorship.
"**Third-Party**"	shall mean any Person other than the Parties, the Target Companies, the Sellers' Affiliates and the Purchaser's Affiliates.
"**Third Party Claim**"	has the meaning ascribed to it in Section 9.4.
"**Thomson Trademark**"	shall mean the Trademarks, as such term is defined in that certain THOMSON Trademark License Agreement Professional Head End Products, dated May 3, 2011, between Technicolor S.A. and Thomson Video Networks.
"**Transaction**"	has the meaning ascribed to it in Paragraph H of the Recitals.
"**Transaction Documents**"	shall mean this Agreement, the Escrow Agreement and the agreement terminating the Existing Inter-Creditors' Agreement referred to in Section 4.3(a)(xviii).
"**Transferred Securities**"	means (i) all the Holding Shares other than the Ordinary Shares held by ManCo, (ii) all the OCRs, (iii) all the OBSAs and (iv) all the ManCo Shares.
"**TVN**"	has the meaning ascribed to it in Paragraph E of the Recitals.
"**TVN ORANs**"	means the outstanding 18,243 bonds redeemable in shares or in cash (*obligations remboursables en actions ou en numéraire*) issued by TVN on May 25, 2012, and fully subscribed and paid up on July 20, 2012.
"**Upward Adjustment**"	has the meaning ascribed to it in Section 2.6.
"**Working Capital**"	shall mean the aggregate amount (positive or negative) as calculated by deducting the current liabilities of the Group Companies required to be reflected on the face of a balance sheet prepared in accordance with the Closing Accounts Accounting Principles (such current liabilities excluding any amount already included in the Debt) as at close of business on the date as of which it is calculated (but without taking into account the consummation of the transaction contemplated hereby when such date is the Closing Date), from the current assets of the Group Companies required to be reflected on the face of a balance sheet prepared in accordance with the Closing Accounts Accounting Principles (such current assets excluding Cash) as at close of business on the date as of which it is calculated (but without taking into account the consummation of the transaction contemplated hereby when such date is the Closing Date), as calculated in accordance with **Schedule 1.1(H) – Working Capital**.

“**Working Capital Adjustment**”	shall mean the difference between the amount of Working Capital as at Closing Date minus the amount of the Normative Working Capital as at Closing Date.

Exhibit 21.1

HARMONIC INC. AND SUBSIDIARIES

SUBSIDIARIES OF THE REGISTRANT

Name	State or Other Jurisdiction of Incorporation	Percent of Voting Securities Owned by Harmonic
Harmonic Delaware, L.L.C.	U.S.A.	100%
Harmonic Europe S.A.S.	France	100%
Harmonic Germany GmbH	Germany	100%
Harmonic Global Limited	Cayman Islands	100%
Harmonic Japan GK	Japan	100%
Harmonic India Private Limited	India	100%
Harmonic International A.G.	Switzerland	100%
Harmonic International Inc.	U.S.A.	100%
Harmonic International Limited	Bermuda	100%
Harmonic Lightwaves (Israel) Ltd.	Israel	100%
Harmonic Poland Sp. Z.o.o	Poland	100%
Harmonic Singapore P.T.E. Ltd.	Singapore	100%
Harmonic Spain SL	Spain	100%
Harmonic Technologies (HK) Limited	Hong Kong	100%
Harmonic (UK) Limited	United Kingdom	100%
Harmonic Video Networks Ltd.	Israel	100%
Harmonic Video Systems Ltd.	Israel	100%
Horizon Acquisition Ltd.	Israel	100%
Harmonic Brasil LTDA	Brazil	100%
Harmonic S.R.I.	Argentina	100%
Harmonic Mexico International	Mexico	100%

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos.333-182931, 333-176211, 333-159877, 333-105873, 333-91464, 333-84720, 333-59248, 333-43160, 333-86649, 333-65051, 333-44265, 333-136425, 333-116467, 333-38025, 333-140935, 333-154715, 333-19777-99, 333-167197, 333-169505, 333-192089, 333-200032 and 333-207866) of Harmonic Inc. of our report dated March 24, 2016 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

San Jose, California

March 24, 2016

Exhibit 31.1

HARMONIC INC.

CERTIFICATION

I, Patrick J. Harshman, certify that:

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

Date: March 24, 2016

By: /s/ Patrick J. Harshman

Patrick J. Harshman
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

HARMONIC INC.

CERTIFICATION

I, Harold Covert, certify that:

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

Date: March 24, 2016

By: /s/ Harold Covert

Harold Covert
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

HARMONIC INC.

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

PURSUANT TO 18 U.S.C. SECTION 1350 AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

As of the date hereof, I, Patrick J. Harshman, President and Chief Executive Officer of Harmonic Inc. (the "Company"), certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the annual report of the Company on Form 10-K for the fiscal year ended December 31, 2015, as filed with the Securities and Exchange Commission (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company. This written statement is being furnished to the Securities and Exchange Commission as an exhibit accompanying such Report and shall not be deemed filed pursuant to the Securities Exchange Act of 1934, as amended.

Date: March 24, 2016

/s/ Patrick J. Harshman

Patrick J. Harshman
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 32.2

HARMONIC INC.

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER

PURSUANT TO 18 U.S.C. SECTION 1350 AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

As of the date hereof, I, Harold Covert, Chief Financial Officer of Harmonic Inc. (the "Company"), certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the annual report of the Company on Form 10-K for the fiscal year ended December 31, 2015, as filed with the Securities and Exchange Commission (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company. This written statement is being furnished to the Securities and Exchange Commission as an exhibit accompanying such Report and shall not be deemed filed pursuant to the Securities Exchange Act of 1934, as amended.

Date: March 24, 2016

/s/ Harold Covert

Harold Covert
Chief Financial Officer
(Principal Financial Officer)