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

FORM 10-K

For the fiscal year ended December 31, 2015

of

ARRIS INTERNATIONAL PLC

(Exact name of registrant as specified in its charter)

England and Wales	001-37672	98-1241619
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(I.R.S. Employer Identification No.)

3871 Lakefield Drive, Suwanee, Georgia	**30024**
(Address of Principal Executive Offices)	(Zip Code)

Registrant's telephone number, including area code: (678) 473-2000

Securities registered pursuant to Section 12(b) of the Act:
Ordinary Shares, £0.01 nominal value — NASDAQ Global Market System

ARRIS International plc is a well-known seasoned issuer.

ARRIS International plc (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 and (2) has been subject to such filing requirements for the past 90 days.

Except as set forth in Item 10, ARRIS International plc is unaware of any delinquent filers pursuant to Item 405 of Regulation S-K.

ARRIS International plc is a large accelerated filer and is not a shell company.

ARRIS International plc is required to submit electronically and post on its corporate web site interactive data files required to be submitted and posted pursuant to Rule 405 of Regulation S-T.

The aggregate market value of ARRIS International plc's Ordinary Shares held by non-affiliates as of June 30, 2015 was approximately $4.4 billion (computed on the basis of the last reported sales price per share of such stock of $30.60 on the NASDAQ Global Market System). For these purposes, directors, officers and 10% shareholders have been assumed to be affiliates.

As of January 31, 2016, 195,192,022 shares of ARRIS International plc's Ordinary Shares were outstanding.

Portions of ARRIS International plc's Proxy Statement for its 2016 Annual Meeting of Stockholders are incorporated by reference into Part III.

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EXPLANATORY NOTE

On January 4, 2016, ARRIS Group, Inc. ("ARRIS Group") completed its combination (the "Combination") with Pace plc, a company incorporated in England and Wales ("Pace"). In connection with the Combination, (i) ARRIS International plc (the "Registrant"), a company incorporated in England and Wales, acquired all of the outstanding ordinary shares of Pace (the "Pace Acquisition") and (ii) a wholly-owned subsidiary of the Registrant was merged with and into ARRIS Group (the "Merger"), with ARRIS Group surviving the Merger as an indirect wholly-owned subsidiary of the Registrant. Under the terms of the Combination, (a) Pace shareholders received 132.5 pence in cash and 0.1455 ordinary shares of the Registrant for each Pace Share they held, and (b) ARRIS Group stockholders received one ordinary share of the Registrant for each share of ARRIS Group common stock they held. Following the Combination, ARRIS Group became an indirect wholly-owned subsidiary of the Registrant and Pace became a direct wholly-owned subsidiary of the Registrant. The ordinary shares of the Registrant trade on the NASDAQ under the symbol "ARRS."

This Annual Report on Form 10-K is being filed by the Registrant on behalf of, and as successor, to ARRIS Group. The Registrant is deemed to be the successor to ARRIS Group pursuant to Rule 12g-3(a) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the ordinary shares of the Registrant are deemed to be registered under Section 12(b) of the Exchange Act. In accordance with Rule 12g-3(g) under the Exchange Act, this Annual Report on Form 10-K covers the last full fiscal year of ARRIS Group and generally contains information that would be required if filed by ARRIS Group. Historical financial results presented herein are those of ARRIS Group only and do not reflect any results of Pace.

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PART I

Item 1. *Business*

As used in this Annual Report, unless the context requires otherwise, “we,” “our,” “us,” “the Company,” and “ARRIS” refer to ARRIS International plc (and its predecessors) and our consolidated subsidiaries.

General

Our principal executive offices are located at 3871 Lakefield Drive, Suwanee, Georgia 30024, and our telephone number is (678) 473-2000. We maintain a website at www.arris.com. The information contained on our website is not part of, and is not incorporated by reference into, this Form 10-K. On our website, we provide links to copies of the annual, quarterly and current reports that we file with the Securities and Exchange Commission (“SEC”), Section 16 reports that our officers and directors file with the SEC, any amendments to those reports, proxy materials for meetings of our shareholders, and all Company news releases. Investor presentations are also frequently posted on our website. Copies of our code of ethics and the charters of our standing board committees also are available on our website. We will provide investors copies of these documents in electronic or paper form upon request, free of charge. We will disclose on our website or on a Current Report on Form 8-K any waivers or amendments to our code of ethics made with respect to our directors and executive officers.

Glossary of Terms

Below are commonly used acronyms in our industry and their meanings:

Acronym	Terminology
AdVOD	Linear and Demand Oriented Advertising
ARPU	Average Revenue Per User
BEQ	Broadband Edge QAM
BSR	Broadband Services Router
Cable VoIP	Cable Voice over Internet Protocol
CAM	Cable Access Module
CBR	Constant Bit Rate
CCAP	Converged Cable Access Platform
CE	Consumer Electronics
CMS	Content Management System
CMTS	Cable Modem Termination System
COTS	Commercial Off the Shelf
CPE	Customer Premises Equipment
CVeX	Converged Video Exchange
CWDM	Coarse Wave Division Multiplexing
DBS	Digital Broadcast Satellite
DCT	Digital Consumer Terminal
DOCSIS®	Data Over Cable Service Interface Specification
DPI	Digital Program Insertion
DRM	Digital Rights Management
DSL	Digital Subscriber Line
DTA	Digital Television Adapter
DVB	Digital Video Broadcasting
DVR	Digital Video Recorder
DWDM	Dense Wave Division Multiplexing
EMTA	Embedded Multimedia Terminal Adapter
EPON	Ethernet over Passive Optical Network
eQAM	Edge Quadrature Amplitude Modulator

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Acronym	Terminology
FPGA	Field Programmable Gate Arrays
FTTH	Fiber to the Home
FTTP	Fiber to the Premises
GAAP	Generally Accepted Accounting Principles
GHZ	Gigahertz
GPA	General Purchase Agreements
HD	High Definition
HD-DVR	High Definition Digital Video Recorder
HDTV	High Definition Television
HDR	High Dynamic Range
HEVC	High Efficiency Video Coding
HFC	Hybrid Fiber-Coaxial
IFRS	International Financial Reporting Standards
ILEC	Incumbent Local Exchange Carrier
IoT	Internet of Things
IP	Internet Protocol
IPR	Intellectual Property Rights
IPTV	Internet Protocol Television
IRD	Integrated Receiver / Decoder
LAN	Local Area Network
Mbps	Megabits per Second
MPEG	Moving Picture Experts Group
MPEG-2	Moving Picture Experts Group, Standard No. 2
MPEG-4	Moving Picture Experts Group, Standard No. 4
M-CMTS	Modular CMTS
MSO	Multiple Systems Operator
MSP	Media Services Platform
MTA	Multimedia Terminal Adapter
MVPD	Multichannel Video Programming Distributors
NGNA	Next Generation Network Architecture
nDVR	Network Digital Video Recorder
nPVR	Network Personal Video Recorder
NSM	Network Service Manager
NIU	Network Interface Unit
OLT	Optical Line Termination
ONU	Optical Network Unit
OEM	Original Equipment manufacturer
OSS	Operations Support System
OTT	Over-the-Top
PC	Personal Computer
PCS	Post Contract Support
PCT	Patent Convention Treaty
PON	Passive Optical Network
PSTN	Public-Switched Telephone Network
PVR	Personal Video Recorder
QAM	Quadrature Amplitude Modulation
QoS	Quality of Service
RDK	Reference Design Kit
RF	Radio Frequency
RFOG	Radio Frequency over Glass
RGU	Revenue Generating Unit

Acronym	Terminology
SCTE	Society of Cable Telecommunication Engineers
SD	Standard Definition
SDV	Switched Digital Video
SLA	Service Level Agreement
TVE	TV Everywhere
UHD	Ultra High Definition
Triple Play	Bundled Offering of Internet, Telephone and TV
VAR	Value-Added Reseller
VOD	Video on Demand
VoIP	Voice over Internet Protocol
VPN	Virtual Private Network
VSP	Video Services Platform / Video Service Provider
VSOE	Vendor-Specific Objective Evidence

Overview

ARRIS, headquartered in Suwanee, Georgia, is a world leader in entertainment and communications technology. Our innovations combine hardware, software, and services across the cloud, network, and home to power TV and Internet for millions of people around the globe. The people of ARRIS collaborate with the world's top service providers, content providers, and retailers to advance the state of our industry and pioneer tomorrow's connected world. For more information, visit www.arris.com.

We operate in two business segments: Customer Premises Equipment ("CPE") and Network & Cloud ("N&C"). We enable service providers including cable, telephone, and digital broadcast satellite operators and media programmers to deliver media, voice, and IP data services to their subscribers. We are a leader in set-tops, digital video and Internet Protocol Television ("IPTV") distribution systems, broadband access infrastructure platforms, and associated data and voice CPE, which we also sell directly to consumers through retail channels. Our solutions are complemented by a broad array of services including technical support, repair and refurbishment, and system design and integration.

Pace Acquisition

On January 4, 2016, we completed the acquisition of Pace. As part of the transaction, both ARRIS Group and Pace became wholly owned subsidiaries of ARRIS International plc, our new holding company incorporated in England and Wales. While our jurisdiction of organization was changed, our corporate headquarters remain in the United States.

Except for historical financial information, which relates only to ARRIS Group, or as context otherwise requires, our description of the company and the industry and markets we operate in described in this Annual Report on Form 10-K reflects the combined operations of ARRIS and Pace. We continue to operate in two business segments — Network & Cloud and Consumer Premises Equipment — and the former Pace products are included in these segments.

Industry Overview

Entertainment and communications delivery is evolving rapidly as a result of a convergence of trends — including increased competition among service providers, industry consolidation, advances in technology, and shifts in global content consumption behaviors.

We have recently seen a marked evolution in consumers' entertainment habits — from a growing preference for program binge-watching to a general increase in direct-to-consumer services using consumer-owned devices. This broadening of content consumption behaviors over a growing number of devices is creating new challenges for service providers as they continue to scale bandwidth and implement new network efficiencies, as well as new demands on the home network to deliver content wirelessly and to every corner of the home.

Video distribution over the broadband IP network is transforming how content is managed and consumed. IP not only facilitates new forms of video — like Over-the-top TV (“OTT”) and interactive television — and the ways in which video is delivered, but it is also accelerating the evolution of communications services, like interactive media and broadband. As a result, service providers are compelled to continually invest in and upgrade their network and expand their video, voice, data, and mobile services. This trend has accelerated as service providers’ race to deliver residential gigabit broadband speeds to fully support new multiscreen video services and support the explosion of Internet of Things (“IoT”) devices.

Providing these advanced services to consumers is a highly competitive business. This environment is driving service providers to enhance and expand their offerings by adding more high-definition (“HD”) channels, and now Ultra High Definition (“UHD”) TV content, increasing data speeds and expanding wireless services to provide converged media experiences that bridge conventional TV and Internet services. This competition underpins the market for regular video and broadband network upgrades as well as technology investment cycles in CPE, such as set-tops, gateways and modems.

Service providers continue to invest in new capabilities to differentiate and gain market share. That investment has resulted in enhanced user interfaces, higher broadband speeds, additional programming, integrated home networking and monitoring services, with higher reliability. These cycles, combined with associated consumer trends and innovation in entertainment and communications delivery continue to accelerate industry growth.

Current Operating Segments

We report two operating segments, (1) Network & Cloud and (2) Customer Premises Equipment. Corporate and other expenses not included in the measure of segment contribution are reported in an “All Other” category. See Note 10 *Segment Information* of Notes to the Consolidated Financial Statements for additional information.

Our Strategy

Our long-term business strategy directly addresses these global industry trends. We collaborate with the world’s leading service and content providers to invent the future, a world where entertainment and communications are connected and personalized, blending seamlessly into our everyday lives. ARRIS pursues these goals in the following ways:

- Providing a balanced portfolio of products and services connecting the home and business to the worldwide Internet
- Investing in global research and development
- Establishing and maintaining deep relationships with our customers
- Targeting leading positions in large global markets
- Expanding our presence in markets in which we have less scale, for example, satellite, telco, professional services and retail
- Balancing both organic and inorganic investments to expand our business
- Enhancing the ARRIS brand

Specific aspects of our strategy include:

- ***Leveraging ARRIS’s scale to drive profitable worldwide growth***. Our comprehensive portfolio and global scale position ARRIS to cater to the world’s leading service providers and capitalize on their investments in our market.
- ***Enabling our service provider customers to provide the necessary broadband capacity to support consumer demand for faster Internet connections and the transition to IP Video***. Consumer demand for faster Internet speeds continues to grow at an escalating rate, primarily driven by an ever increasing con-

sumption of video. ARRIS provides the technology to enable our customers to manage this exponential bandwidth growth cost effectively. We invest in both DOCSIS and Next Generation PON (FTTH) to ensure our products are at the forefront in enabling service providers to deliver the very highest amount of bandwidth to their subscribers.

- ***Capitalizing on the evolution towards network convergence and all IP platforms to drive business growth.*** Service providers face a unique challenge in preparing for the future: delivering today's new services on legacy equipment, while transitioning to an all-IP model to anticipate the demand for tomorrow's advanced services. ARRIS collaborates with its global customers to transform their entire delivery chain from content creation to consumption. Our broad portfolio offers a variety of pathways for delivering tomorrow's services through a combination of network-based video transcoding, packaging, and compression technologies required to deliver new IP video formats; cloud-based platforms to deliver robust and personalized user experiences; and home gateways that are the new hub for delivering IP-based entertainment to connected devices inside and outside the home.
- ***Enabling differentiated and personalized multiscreen experiences through a holistic approach to content delivery***. The growth of connected consumer devices has created an opportunity for service providers to deliver new, more personalized content experiences to consumers across multiple screens. These experiences require control over content distribution as well as seamless integration into multiple touchpoints in the consumer experience. ARRIS is transforming the entertainment experience through a holistic approach to content delivery, leveraging our expertise in the cloud, network, and home — to help providers anticipate demand for more personalized, relevant, and mobile experiences.
- ***Investing in our product and service portfolios through development, partnership and acquisition.*** ARRIS's growth strategy is focused on investing in the right opportunities to significantly expand our business. We leverage our global scale and innovation around the world. We regularly seek organic investment and acquisition opportunities that position ARRIS for future growth.
- ***Expanding our international business and exploring adjacent market opportunities***. ARRIS continuously seeks and analyzes investments in opportunities that allow us to capitalize on the growth of video and broadband services in global markets. Some examples include the growth of digital video and HDTV in the Caribbean and Latin America, Europe, the Middle East and Africa ("EMEA") and Asia as well as the demand for increased data speeds that are driving infrastructure investment. We also are pursuing opportunities in new and adjacent markets, including satellite, telco, professional services and retail.

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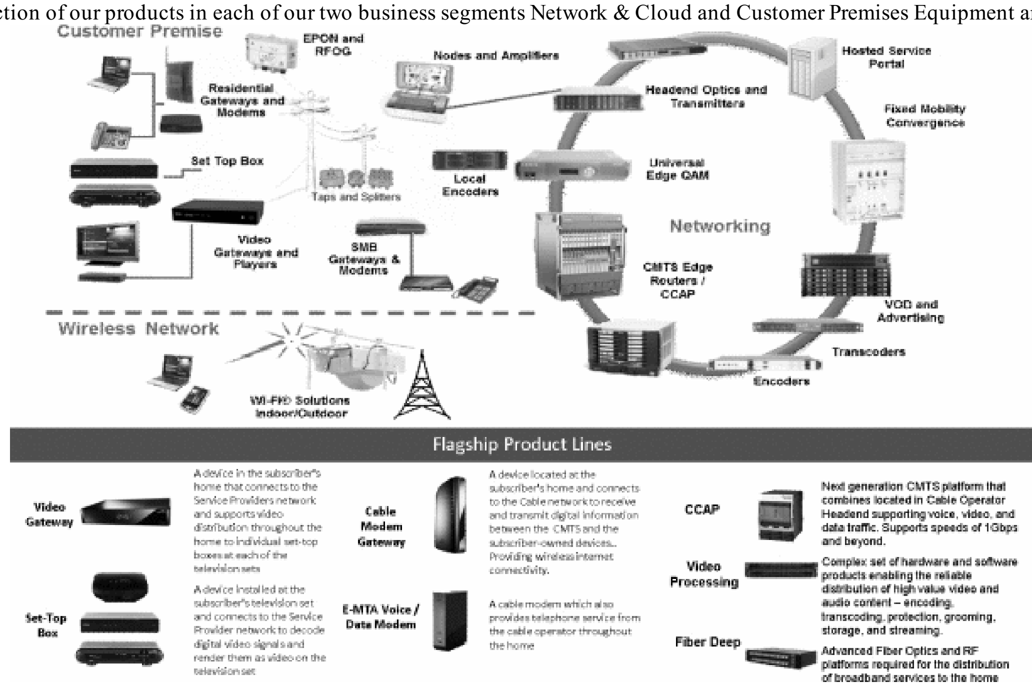
Our Principal Products

Our innovations combine hardware, software, and services across the cloud, network, and home to power TV and Internet for millions of people around the globe. A cross-section of our products in each of our two business segments Network & Cloud and Customer Premises Equipment are depicted below:



Network & Cloud

- Infrastructure Products

CMTS/CCAP

- The Cable Modem Termination System ("CMTS") is cable operator headend equipment that communicates with cable modems to control the flow of data; allocates shared bandwidth and prioritizes and routes traffic. The Converged Cable Access Platform ("CCAP") combines the functionality of a CMTS and an Edge QAM to enable voice, video and data in a converged IP network

Video Infrastructure

- Multichannel Video Programming Distributors ("MVPD") and Programmer Equipment that process and package video content for delivery over the service provider network to be received by a set-top or gateway. Includes encoding, compression, transcoding, storage, policy management, security and encryption, and signal modulation for HFC, DSL and/or fiber networks.
- Ad Insertion Technologies supporting linear and on demand ad placement and substitution in MPEG and IP delivery environments.

Access & Transport

- Equipment in the ground or on transmission poles between service providers' headend and subscribers' premises, as well as equipment used to initiate the distribution of content-carrying signals. Includes optical transmission equipment, Fiber Nodes, RF Amplifiers and metro Wi-Fi wireless products.

- Global Services
  - Technical support, professional services, and systems integration capabilities to roll out new solutions and services at a great speed and cadence.
- Cloud Solutions
  - Software products that enable providers to securely deliver rich user experiences; multiscreen recommendations, offer management, and advertising services.
  - Network Management products that collect vast amounts of information from the Broadband network and apply analytics to diagnose faults and improve performance.
  - Workforce management solutions enabling Service Providers to efficiently manage and dispatch field technicians. Network surveillance and issue correlation software and services.

Customer Premises Equipment

- CPE Products

Set-Top

- A device installed at the subscriber's television set and connects to the service provider network to decode secure digital video signals and render them as video on the television set.

Gateway

- A device that connects to the service provider network and delivers video, voice, and data services throughout the subscriber's home.

DSL and Cable Modem

- A device located at the subscriber's home that connects to the cable or telco network to receive and transmit digital information between subscriber-owned devices (e.g. PC or tablet) and the service provider's headend or central office, providing Internet connectivity.

E-MTA and Voice / Data Modem

- A modem that also provides both data and telephone service from the service provider throughout the home.

Sales and Marketing

Our sales, sales engineering and technical services teams serve our global customers through offices in the U.S. and many of our global markets. We also work with value added resellers ("VARs"), sales representatives and channel partners that extend our sales presence into operator markets where we do not have established sales offices. We also maintain an inside sales group that is responsible for regular phone contact with the customer, prompt order entry, timely and accurate delivery, and effective sales administration.

Our sales engineering team assists customers in system design and specification. Our technical services team provides professional services to help network operators design and keep their networks operating at peak performance. We provide 24x7 technical support, directly and through channel partners, as well as training, both at our facilities and at our customers' sites.

We achieve superior customer service through advanced customer relationship management programs combined with information systems that allow us to provide personalized and timely customer support on a range of subjects and to continually refine operations management.

Our marketing organization promotes both the ARRIS brand and our solutions to key stakeholders including customers, consumers, partners, prospects and employees throughout the world. It is complemented by a product management team, which works with our engineering bench to develop and market new products and product enhancements. These teams are responsible for inventory levels, pricing, delivery requirements, market demand analysis, as well as product positioning, communications and advertising.

Customers

The majority of our sales are to facilities-based cable and telco multi-channel video service providers. As the global cable, satellite and telecommunications industries continue a trend toward consolidation, our sales to the largest service providers are crucial to our success. Our sales are substantially dependent upon a system operator's selection of ARRIS's network equipment, demand for increased broadband services by subscribers, and general capital expenditure levels by system operators. Our two largest customers (including their affiliates, as applicable) are Comcast and Time Warner Cable. From time to time, the affiliates included in our revenues from these customers have changed as a result of mergers and acquisitions. Therefore, the revenue for our customers for prior periods has been adjusted to include, on a comparable basis for all periods presented, the affiliates currently understood to be under common control. Our sales to these customers for the last three years were (in thousands, except percentages):

	Years ended December 31,		
	2015	2014	2013
Comcast and affiliates	$ 1,007,892	$ 1,012,367	$ 674,977
% of sales	21.0%	19.0%	18.6%
Time Warner Cable and affiliates	$ 687,645	$ 600,770	$ 331,829
% of sales	14.3%	11.3%	9.2%

ARRIS generally utilizes standard terms of sale. These standard terms of sale apply to all customer purchases except those to a few of our large customers with whom we have executed general purchase agreements ("GPAs"). These GPAs do not generally obligate the customer to a specific volume of business. The vast majority of our sales, whether to customers with GPAs or otherwise, result from periodic purchase orders. We have multiple agreements with our largest customers, including Comcast and Time Warner Cable, based upon their needs or as a result of prior acquisitions. We maintain these agreements in the normal course of our business.

International Operations

Our international revenue is generated primarily from Asia-Pacific, EMEA and Americas. The Asia-Pacific market includes Australia, China, Hong Kong, India, Japan, Korea, Singapore, and Taiwan. The EMEA market includes Austria, Belgium, France, Germany, Great Britain, Hungary, Ireland, Israel, Netherlands, Norway, Poland, Portugal, Romania, Russia, Spain, Sweden, Switzerland and Turkey. The Americas market includes Argentina, Bahamas, Brazil, Canada, Chile, Colombia, Costa Rica, Ecuador, Honduras, Jamaica, Mexico, Panama, Peru and Puerto Rico. Revenues from international customers were approximately 28.7%, 25.7%, and 32.1% of total revenues for 2015, 2014 and 2013, respectively.

We continue to strategically invest in worldwide marketing and sales efforts. We currently maintain international sales offices in Argentina, Brazil, Chile, China, Great Britain, Japan, Korea, Mexico, Netherlands and Spain.

Research and Development

We operate in an industry that is subject to rapid changes in technology and our success is largely contingent upon anticipating such changes. Accordingly, we invest significantly in research and development. This commitment to innovation resulted in the development of many next-generation consumer solutions such as CCAP, DOCSIS3.1, HD-DVR, WholeHome DVR/media server, in-home and metro Wi-Fi, IoT and 4K/UHD. We continue to innovate in anticipation of both our customers' needs and developing industry trends, including:

- ***Transforming the Entertainment Experience*** — solving the complexity of delivering content to the growing number of connected devices through scalable networking and connectivity solutions in the home that enable efficient streaming of OTT and other advanced entertainment services.

- ***Delivering Your Media, Your Way*** — anticipating demand for more personalized, relevant, and mobile experiences with end-to-end multiscreen solutions to personalize and monetize tomorrow's content experiences.
- ***Powering Smarter Networks*** — realizing the potential of today's entertainment technology, monetizing future services like UHD, IoT, Gigabit Wi-Fi and multiscreen, and transitioning to all-IP networks through powerful transcoding, bandwidth optimization, and video compression technologies.
- ***Broadband Access*** — employing state-of-the-art computing and packet processing technologies to solve the last-mile bottleneck, providing ever higher residential speeds and bandwidth.
- ***Cloud*** — the enablement of complex function to be performed in the "cloud" to simplify and streamline the in home network and the service providers' network operations.

We have significant engineering resources and employees in the U.S. dedicated to research and development through laboratories in Beaverton, Oregon; Horsham, Pennsylvania; Kirkland, Washington; Lisle, Illinois; Santa Clara, California; San Diego, California; San Jose, California; Suwanee, Georgia; Wallingford, Connecticut; and Lowell, Massachusetts, as well as internationally in Bangalore, India; Cork, Ireland; Linkoping, Sweden; Paris, France; Saltaire, United Kingdom; and Shenzhen, China. We recently announced plans to close our research and development facilities located in Cordoba, Argentina and Tel Aviv, Israel.

Research and development expenses in 2015, 2014 and 2013 were approximately $534.2 million, $556.6 million and $425.8 million, respectively. Research and development expenses as a percent of sales in 2015, 2014 and 2013 were approximately 11.1%, 10.5% and 11.8%, respectively. These costs include allocated common costs associated with information technology and facilities.

Intellectual Property

We have an active patenting program for protecting our innovations. During 2015, we continued to enhance our patent portfolio. We were awarded 213 patents and filed 567 patent applications. As of January 31, 2016, our intellectual property portfolio consisted of approximately 2,340 issued patents (both U.S. and foreign), including patents acquired in connection with the Pace acquisition and we continue to pursue patent protection on new inventions (currently approximately 1,282 U.S. and foreign patent applications pending). In our effort to pursue new patents, we have created a process whereby employees may submit ideas of inventions for review by management. The review process evaluates each submission based on criteria that includes: novelty, potential commercial value of the invention, and detectability of infringement. Patent applications are filed on the inventions that meet the criteria.

Although patents generally have a 20 year legal life, the relevant technologies to which the patents apply often have much shorter lives. As such, the economic useful life of the patents is often the same as that of the associated developed technology.

Our patents and patent applications generally are in the areas of telecommunications hardware, software and related technologies. For technology that is not owned by us, we have a program for obtaining appropriate licenses to ensure that we have the necessary license coverage for our products. In addition, we have formed strategic relationships with leading technology companies to provide us with early access to technology that we believe will help keep us at the forefront of our industry.

We also have a program for protecting and developing trademarks. As of January 31, 2016, ARRIS had 656 registered or pending trademark registrations, including trademarks acquired in connection with the Pace acquisition. Our trademark program includes procedures for the use of current trademarks and for the development of new trademarks. This program is designed to ensure that our employees properly use our registered trademarks and any new trademarks that are expected to develop strong brand loyalty and name recognition. The design of our trademark program is intended to protect our trademarks from dilution or cancellation.

From time to time there are significant disputes with respect to the ownership of the technology used in our industry and accusations of patent infringements. See Part I, Item 3, "Legal Proceedings."

Product Sourcing and Distribution

We maintain a balance of internal and external manufacturing providers to continue offering our customers a competitive combination of quality, cost and flexibility in meeting their needs. We operate manufacturing facilities in Taipei, Taiwan; Tijuana, Mexico; and Manaus, Brazil (effective with the acquisition of Pace in 2016). We also use contract manufacturers located in Brazil, China, Thailand, Malaysia, Mexico, South Africa and the United States.

We provide our contract manufacturers with rolling, non-binding forecasts, and we typically have a minimum of 60 days of purchase orders placed with them for products. Purchase orders for delivery within 60 days generally are not cancelable. Purchase orders with delivery past 60 days generally may be cancelled with penalties in accordance with each vendor's terms. Each contract manufacturer provides a minimum 15-month warranty.

We manufacture a significant portion of our video set-tops and gateways in our manufacturing facility in Taipei, Taiwan. The factory is 209,600 square feet, and, as of December 31, 2015, the facility employed approximately 1,060 people. We manufacture a limited amount of video set-tops in Manaus Brazil to serve the local market. Current outsourcing arrangements include set-tops, modems, DTAs and IP set-tops.

We manufacture a portion of our Network & Cloud products in our manufacturing facility in Tijuana, Mexico. The factory is 83,124 square feet, and, as of December 31, 2015, the facility employed approximately 450 people. Current outsourcing arrangements include CMTS, amplifiers, certain power supplies, accessories, optical modules, digital return modules, circuit boards, repair services, and video infrastructure equipment.

We distribute a substantial number of products that are not produced by us in order to provide our customers with a comprehensive portfolio offering. Domestically, we distribute hardware and installation products through regional warehouses in California, North Carolina, and Washington. Internationally, we distribute through regional warehouses in Australia, Japan and Germany, and through drop shipments from our contract manufacturers located throughout the world.

We obtain key components from numerous third-party suppliers. Our supply agreements include technology licensing and component purchase contracts. Several of our competitors have similar supply agreements for these components. In addition, we license software for operating network and security systems or sub-systems, and a variety of routing protocols from different suppliers.

Backlog

Our backlog consists of unfilled customer orders (believed to be firm and long-term contracts) that have not been completed. With respect to long-term contracts, we include in our backlog only amounts representing orders currently released for production or, in specific instances, the amount we expect to be released in the succeeding 12 months. The amount contained in backlog for any contract or order may not be the total amount of the contract or order. The amount of our backlog at any given time does not reflect expected revenues for any fiscal period.

Our backlog at December 31, 2015, excluding Pace, was approximately $715.8 million, at December 31, 2014 was approximately $631.0 million, and at December 31, 2013 was approximately $538.6 million. We believe that all of the backlog existing at December 31, 2015 will be shipped in 2016.

Anticipated orders from customers may fail to materialize and delivery schedules may be deferred or cancelled for a number of reasons, including reductions in capital spending by network operators, shipping disruptions, customer financial difficulties, annual capital spending budget cycles, and construction delays.

Competition

The markets in which we participate are dynamic and highly competitive, requiring companies to react quickly to capitalize on opportunity. We retain skilled and experienced personnel, and deploy substantial resources to meet the changing demands of the industry and to capitalize on change. We compete with international, national and regional manufacturers, distributors and wholesalers including companies that are larger than we are. Our major competitors include:

- ADB Global;
- Asus;
- ATX;
- Belkin;
- BKTel;
- Casa Systems, Inc.;
- Cisco Systems, Inc.;
- Commscope, Inc.;
- Concurrent Computer Corporation;
- Emcore Corporation;
- Ericsson;
- Finisar;
- Gainspeed;
- Guavus;
- Harmonic, Inc.;
- Hitron Technologies Americas Inc.;
- Huawei;
- Humax Co.;
- InnoTrans;
- Kathrein;
- Lindsay Broadband;
- Netgear;
- Netgem;
- Pacific Broadband Networks;
- PCT International;
- RGB Networks;
- Rovi;
- Sagemcom;
- Samsung;
- SeaChange International, Inc.;
- SMC Networks;
- Technetix;
- Technicolor S.A.;

- Teleste;
- TiVo Inc.;
- Thomson Video Networks;
- TOA Technologies (Oracle);
- TVC Communications, Inc.;
- Ubee Interactive, Inc.;
- Vecima Networks, Inc.; and
- ZTE

We distinguish our products on the basis of reliability and performance, differentiated features, flexibility, breadth, customer service, and availability of business solutions, while pricing our solutions competitively with those of other manufacturers.

Consumer demand for more bandwidth is a fundamental driver behind the continued growth in CMTS and CCAP Edge Routing capacity deployed by service providers worldwide. The CMTS/CCAP supplier space is highly competitive with strong historical players such as Cisco and announcements of new products from manufacturers such as Casa, Gainspeed and Harmonic.

ARRIS is a worldwide leader in CMTS and CCAP. Our portfolio of IP network solutions continues to provide the scale and efficiency to power service providers' transition to next-generation networks and services. Showcase solutions like our E6000® Converged Edge Router are behind this global momentum and are responsible for providing service to millions of subscribers through the world's leading service providers.

These network solutions are complemented by ARRIS's comprehensive leadership in CPE — including video set-tops/gateways, DOCSIS, DSL, and FTTH solutions. Combined with our global scale, our extensive portfolio and R&D capabilities accelerate time-to-market for next-generation services — enabling our partners to anticipate and meet rapid changes in consumer demand. This positions ARRIS to capitalize on several key industry opportunities: 1.) the set-top's evolution into the gateway for all communications, media, and other connected services; 2.) the shift to gigabit Wi-Fi and its growing role as a principal conduit for the connected home; 3.) the refresh cycle of today's broadly deployed base of set-tops and broadband gateways; and 4.) the evolution and hybridization of network standards and models, from xDSL to G.Fast, D3.1 to xPON, new IP video services, and more.

Our multi-screen content management and protection products compete with many vendors offering on-demand video and digital advertising insertion hardware and software, including Adobe, Cisco, Concurrent, Ericsson, Irdeto, SeaChange, TiVo, Verimatrix, and others. Our operations management systems compete with vendors offering network management, mobile workforce management, network configuration management, and network capacity management systems such as TOA Technologies, Click Software, Guavus and others, some of which may currently have greater sales in these areas than ARRIS. In some instances, our customers internally develop their own software for these functions. However, we believe that we offer a more integrated solution that gives us a competitive advantage in supporting the requirements of both today's distribution networks and the emerging all-digital, packet-based networks.

We also compete with companies such as Cisco, Harmonic, Huawei, Teleste, Technetix and ZTE for network distribution and access equipment. In recent periods, competition in this market has also increased from aftermarket suppliers, whose primary focus is on the refurbishment of OEM equipment, resulting in additional competition for new sales opportunities. In addition, because of the convergence of the cable and telecommunications and rapid technological development, new competitors may enter this space.

Lastly, some of our competitors are larger companies with greater financial resources and product breadth than us. This may enable them to bundle products or be able to market and price products more aggressively than we can.

Regulation and Corporate Responsibility

Our products and operations are subject to numerous U.S. and international regulations and requirements in the areas of labor, environmental compliance including energy efficiency standards, health and safety and ethics. Historically compliance with such regulations has not had a material impact on our business or results of operations.

We are committed to strong corporate responsibility, and in 2015 we continued our participation as an active member of the Electronic Industry Citizenship Coalition ("EICC"), a non-profit coalition of electronics companies dedicated to supporting the rights and wellbeing of workers and communities affected by the global electronics supply chain. We continue to work with our suppliers by utilizing the EICC process collaboratively to improve working and environmental conditions through industry leading standards and practices to drive continual improvement and mitigate risk. Additional information regarding these policies and programs is available under the "Investors" tab of our corporate web site (*www.arris.com*).

As signatories to the Voluntary Agreement for Ongoing Improvement to the Energy Efficiency of Set-Top Boxes and Small Network Equipment in the U.S. and the Voluntary Industry Agreement to Improve the Energy Consumption of Complex Set-Top Boxes and Small Network Equipment in the European Union, we continued to be committed to reducing our environmental impact through increasing the energy efficiency of our products while still protecting our need to adapt to rapidly changing technology and the introduction of new features.

Employees

As of January 31, 2016, we had approximately 8,520 employees, which include employees from the Pace acquisition. ARRIS has no employees represented by unions within the United States. We believe that we have a strong relationship with our employees. Our future success depends, in part, on our ability to attract and retain key personnel. Competition for qualified personnel in the cable industry is intense, and the loss of certain key personnel could have a material adverse effect on us. We have entered into employment contracts with our key executive officers and have confidentiality agreements with substantially all of our employees. We also have long-term incentive programs that are intended to provide substantial incentives for our key employees to remain with us.

Item 1A. Risk Factors

Our business is dependent on customers' capital spending on broadband communication systems, and reductions by customers in capital spending would adversely affect our business.

Our performance is primarily dependent on customers' capital spending for constructing, rebuilding, maintaining or upgrading broadband communications systems. Capital spending in the broadband communications industry is cyclical and can be curtailed or deferred on short notice. A variety of factors affect capital spending, and, therefore, our sales and profits, including:

- demands for network services;
- general economic conditions;
- foreign currency fluctuations;
- competition from other providers of broadband and high-speed services;
- customer specific financial or stock market conditions;
- availability and cost of capital;
- governmental regulation;
- customer acceptance of new services offered; and
- real or perceived trends or uncertainties in these factors.

Several of our customers have accumulated significant levels of debt. These high debt levels, coupled with the volatility in the capital markets, may impact their access to capital in the future. Even if the financial health of our customers' remains intact, these customers may not purchase new equipment at levels we have seen in the past or expect in the future. We cannot predict the impact, if any, of any softening or downturn in the national or global economy or of specific customer financial challenges on our customer's expansion and maintenance expenditures.

We may not realize all of the anticipated benefits of the recently completed Pace acquisition or those benefits may take longer to realize than expected. We may also encounter significant unexpected difficulties in integrating the two businesses.

Our ability to realize all of the anticipated benefits of the recently completed Pace acquisition will depend on our ability to integrate the Pace businesses with our historic operations. The combination of two independent businesses is a complex, costly and time-consuming process. As a result, we will be required to devote significant management attention and resources to integrating the business practices and operations of ARRIS and Pace. The integration process may disrupt the businesses and, if implemented ineffectively, could preclude realization of the full benefits expected. Our failure to meet the challenges involved in integrating the two businesses to realize the anticipated benefits of the transaction could cause an interruption of, or a loss of momentum in, the activities of the business and could adversely affect our results of operations.

In addition, the overall integration of the Pace business may result in material unanticipated problems, expenses, liabilities, competitive responses, and loss of customer relationships. The difficulties of combining the operations of the companies include, among others:

- the diversion of management's attention to integration matters;
- difficulties in achieving anticipated cost savings, synergies, business opportunities and growth prospects expected from the transaction;
- difficulties in the integration of operations and systems; and
- difficulties in managing the expanded operations of a larger and more complex company.

Many of these factors are outside of our control and any of them could result in increased costs, and decreases in the amount of expected revenues, which could materially impact our business, financial condition and results of operations. In addition, even if the operations of the Pace are integrated successfully, we may not realize the full benefits of the combination, including the potential synergies, cost savings or sales or growth opportunities. These benefits may not be achieved within the anticipated time frame, or at all, or additional unanticipated costs may be incurred in the integration. All of these factors could cause dilution to our earnings per share, decrease or delay the expected accretive effects of the transaction, or negatively impact the trading price of our ordinary shares. As a result, we cannot provide assurance that the combination of the ARRIS and Pace businesses will result in the realization of the full benefits anticipated from the transaction.

Our effective tax rates, which generally are expected to decrease as a result of the transaction, are also subject to a variety of other factors, many of which are beyond our ability to control, such as changes in the rate of economic growth in jurisdictions in which the combined business operates, the financial performance of the combined business in various jurisdictions, currency exchange rate fluctuations, and significant changes in trade, monetary or fiscal policies, including changes in interest rates, and changes in U.S. tax laws, UK tax laws and the tax laws of the other jurisdictions in which we do business. The impact of these factors, individually and in the aggregate, is difficult to predict, in part because the occurrence of the events or circumstances described in such factors may be interrelated, and the impact to the combined company of the occurrence of any one of these events or circumstances could be compounded or, alternatively, reduced, offset, or more than offset, by the occurrence of one or more of the other events or circumstances described in such factors.

The market in which we operate is intensely competitive, and competitive pressures may adversely affect our results of operations.

The markets in which we participate are dynamic, highly competitive and require companies to react quickly and capitalize on change. We must retain skilled and experienced personnel, as well as deploy substantial resources to meet the changing demands of the industry and must be nimble to be able to capitalize on change. We compete with international, national and regional manufacturers, distributors and wholesalers including some companies that are larger than we are. We list our major competitors in Part I, Item 1, "Business".

In some instances, our customers themselves may be our competition. Some of our customers may develop their own software requiring support within our products and/or may design and develop products of their own which are produced to their own specifications directly by a contract manufacturer. The rapid technological changes occurring in broadcast and broadband communications industry may lead to the entry of new competitors, including those with substantially greater resources than our own. Because the market in which we compete is characterized by rapid growth and, in some cases, low barriers to entry, smaller companies and start-up ventures also may become principal competitors in the future. Actions by existing competitors and the entry of new competitors may have an adverse effect on our sales and profitability. In the future, technological advances could lead to the obsolescence of some of our current products, which could have a material adverse effect on our business.

Further, several of our larger competitors may be in a better position to withstand any significant, sustained reduction in capital spending by customers. They often have broader product lines and segment focus and therefore are not as susceptible to downturns in a particular market. In addition, several of our competitors have been in operation longer than we have, and therefore have more established relationships with customers.

Consolidations in the broadcast and broadband communication systems industry could have a material adverse effect on our business.

The broadcast and broadband communication systems industry has historically experienced, and continues to experience, the consolidation of many industry participants. For example, Charter Communications, Inc. has announced its intention to acquire Time Warner Cable, AT&T recently completed its acquisition of DIRECTV, Verizon Communications Inc. announced that it is selling certain wireline businesses to Frontier Communications Corp., which transaction is expected to close in March 2016, and Altice recently completed its acquisition of Suddenlink and has announced its intention to acquire Cablevision. When consolidations occur, it is possible that the acquirer will not continue using the same suppliers, possibly resulting in an immediate or future elimination of sales opportunities for us. Even if sales are not reduced, consolidations also could result in delays in purchasing decisions by the affected companies prior to completion of the transaction. Further, even if we believe we will receive additional sales from a customer following a transaction as a result of typical network upgrades that following combinations or otherwise, no assurance can be provided that such anticipated sales will be realized. In addition, consolidations can also result in increased pressure from customers for lower prices or better terms, reflecting the increase in the total volume of products purchased or the elimination of a price differential between the acquiring customer and the company acquired. Any of these results could have a material adverse effect on our business.

Proposed FCC regulations for the broadband communications industry could significantly impact our operations.

The Federal Communications Commission (the "FCC") has adopted new "net neutrality" regulations that, among other things, subject Internet service providers to common carriage regulation under Title II of the Communications Act. These regulations have been challenged in federal court. In addition, the FCC recently proposed new rules designed to impose new technology mandates on multichannel video programming distributors ("MVPDs") that would include many of our customers aimed at enabling retail video devices to access MVPD services without the need for an operator-supplied set-top box. If implemented, such mandates could result in our customers reducing their investment in their networks and in the development and deployment of new set-top boxes. A significant reduction in their capital expenditures as a result of any such regulations could adversely affect our business, operating results, and financial condition.

We have significant indebtedness, which could limit our operations and opportunities, make it more difficult for us to pay or refinance our debts and/or may cause us to issue additional equity in the future, which would increase the dilution of our stockholders or reduce earnings.

As of December 31, 2015, we had approximately $1,540.0 million in total indebtedness, and we incurred approximately $800.0 million in additional indebtedness to fund the Pace acquisition in January 2016. As of December 31, 2015, we had a $497.9 million available under our revolving line of credit to support our working capital needs. Our debt service obligations with respect to this indebtedness could have an adverse impact on our earnings and cash flows for as long as the indebtedness is outstanding.

This significant indebtedness could also have important consequences to stockholders. For example, it could:

- make it more difficult for us to pay or refinance our debts as they become due during adverse economic and industry conditions because any decrease in revenues could cause us to not have sufficient cash flows from operations to make our scheduled debt payments;
- limit our flexibility to pursue other strategic opportunities or react to changes in our business and the industry in which we operate and, consequently, place us at a competitive disadvantage to competitors with less debt;
- require a substantial portion of our cash flows from operations to be used for debt service payments, thereby reducing the availability of our cash flow to fund working capital, capital expenditures, acquisitions and other general corporate purposes; and
- result in higher interest expense in the event of increases in interest rates since the majority of our debt is subject to variable rates.

Based upon current levels of operations, we expect to be able to generate sufficient cash on a consolidated basis to make all of the principal and interest payments when such payments are due under our senior secured credit facilities; but there can be no assurance that we will be able to repay or refinance such borrowings and obligations.

We may consider it appropriate to reduce the amount of indebtedness currently outstanding. This may be accomplished in several ways, including issuing additional ordinary shares or securities convertible into ordinary shares, reducing discretionary uses of cash or a combination of these and other measures. Issuances of additional ordinary shares or securities convertible into ordinary shares would have the effect of diluting the ownership percentage that stockholders will hold in the company and may reduce our reported earnings per share.

We face risks relating to currency fluctuations and currency exchange.

On an ongoing basis we are exposed to various changes in foreign currency rates because certain sales are denominated in foreign currencies. Additionally, certain intercompany transactions are denominated in foreign currencies and subject to revaluation. These changes can impact our results of operations, cash flows and financial position. We manage these risks through regular operating and financing activities and periodically use derivative financial instruments such as foreign exchange forward and option contracts. There can be no assurance that our risk management strategies will be effective. In addition, many of our international customers make purchases from us that are denominated in U.S dollars. As we have seen the U.S. dollar strengthen, it has impacted these customers' ability to purchase products. For example, based on the foreign exchange rates as of December 31, 2015 and 2014, the value of the Brazilian real, the Argentine peso and the Mexican peso decreased approximately 49%, 53% and 18% against the U.S. dollar, respectively, which significantly impacted purchases by our customers in these countries in 2015. Further strengthening could have a material impact on our sales in the affected countries.

We also may encounter difficulties in converting our earnings from international operations to U.S. dollars for use in the United States. These obstacles may include problems moving funds out of the countries in which the funds were earned and difficulties in collecting accounts receivable in foreign countries where the usual accounts receivable payment cycle is longer.

We may have difficulty in forecasting our sales and may experience volatility in revenues.

Because a significant portion of our customer's purchases are discretionary, accurately forecasting our sales is difficult. In addition, our customers in recent years have submitted their purchase orders less evenly over the course of each quarter and year, and with shorter lead times than they have historically. The combination of our dependence on relatively few key customers and the award by those customers of irregular but sizeable contracts, together with the size of our operations, make it difficult to forecast sales and can result in revenue volatility, which could further result in maintaining inventory levels that are too high or too low for our ultimate needs and could have a negative impact on our business.

The broadcast and broadband communications system industry on which our business is focused is significantly impacted by technological change.

The broadcast and broadband communication systems industry has gone through dramatic technological change resulting in service providers rapidly migrating their business from a one-way television service to a two-way communications network enabling multiple services, such as residential and business high-speed Internet access, residential and business telephony services, digital television, video on demand and advertising services. New services, such as home security, power monitoring and control, 3-D and 4K (UHD) television that are or may be offered by service providers, are also based on, and will be characterized by, rapidly evolving technology. The development of increasing transmission speed, density and bandwidth for Internet traffic has also enabled the provision of high quality, feature length video over the Internet. This over-the-top IP video service enables content providers such as Netflix and Hulu, programmers such as HBO and ESPN and portals like Google to provide video services on-demand, by-passing traditional video service providers. The Chairman of the FCC has also announced his intention to have the FCC adopt new regulations to facilitate the ability of over-the-top services to compete against traditional multichannel video programming providers. As these service providers enhance their quality and scalability, traditional providers are introducing similar services over their existing networks, as well as over-the-top IP video for delivery not only to televisions but to computers, tablets, and telephones in order to remain competitive. Our business is dependent on our ability to develop products that enable current and new customers to exploit these rapid technological changes. We believe the continued growth of over-the-top IP video represents a shift from the traditional video delivery paradigm. To the extent that we are unable to adapt our technologies to serve this emerging demand, including obtaining necessary certifications from content providers and programmers to include their over-the-top video applications as part of our product offerings, our business may be adversely affected.

The continued industry move to open standards may impact our future results.

The broadcast and broadband communication systems industry has and will continue to demand products based on open standards. The move toward open standards, including the FCC's proposed rules, is expected to increase both the number of service providers that will offer services to the market. This trend is also expected to increase the number of competitors who are able to supply products to service providers and drive down the capital costs per subscriber deployed. These factors may adversely impact both our future revenues and margins. In addition, many of our customers participate in "technology pools" and increasingly request that we donate a portion of our source code used by the customer to these pools which may impact our ability to recapture the R&D investment made in developing such code.

We believe that we will be increasingly required to work with third party technology providers. As a result, we expect the shift to more open standards may require us to license software and other components indirectly to third parties via various open source licenses. In some circumstances, ARRIS's use of such open source technology may include technology or protocols developed by standards settings bodies, other industry forums or third party companies. The terms of the open source licenses granted by such parties may limit our ability to commercialize products that utilize such technology, which could have a material adverse effect on our results.

We no longer have use of the "Motorola" brand name.

In connection with our acquisition of Motorola Home, we were granted the right, subject to certain conditions, to continue to use the Motorola brand name on certain products. Our right to use the Motorola brand name ended at the end of 2015 and use of the brand name for products similar to products that we sell in the retail channel has been licensed to a competitor of ours. Shelf space in retail outlets can be impacted by how recognizable a brand is by customers. If our rebranding of those products is not successful, or if use of the Motorola brand by a competitor causes confusion amongst customers, our retail sales may decrease. Further, the loss of the use of the "Motorola" brand may result in a lower amount of shelf space, or space in less desirable areas, which may impact our sales.

Our business is concentrated in a few key customers. The loss of any of these customers or a significant reduction in sales to any of these customers would have a material adverse effect on our business.

For the year ended December 31, 2015, sales to our two largest customers (including their affiliates, as applicable) accounted for approximately 35.3% of our total revenue. While we will have less customer concentration as a result of the Pace acquisition, sales to some customers are expected to significantly increase. The loss of any of our large customers, or a significant reduction in the products or services provided to any of them would have a material adverse impact on our business. For many of these customers, we also are one of their largest suppliers. As a result, if from time-to-time customers elect to purchase products from our competitors in order to diversify their supplier base and to dual-source key products or to curtail purchasing due to budgetary or market conditions, such decisions could have material consequences to our business. In addition, because of the magnitude of our sales to these customers the terms and timing of our sales are heavily negotiated, and even minor changes can have a significant impact upon our business.

We may face higher costs associated with protecting our intellectual property or obtaining necessary access to the intellectual property of others.

Our future success depends in part upon our proprietary technology, product development, technological expertise and distribution channels, in addition to a number of important patents and licenses. We cannot predict whether we can protect our technology or whether competitors will be able to develop similar technology independently and such technology could be subject to challenge, unlawful copying or other unfair competitive practices. Given the dependence on technology within the market in which we complete, there are frequent claims and related litigation regarding patent and other intellectual property rights. We have received, directly or indirectly, and expect to continue to receive, from third parties, including some of our competitors, notices claiming that we, or our customers using our products, have infringed upon third-party patents or other proprietary rights. We are involved in several proceedings (and other proceedings have been threatened) in which our customers were sued for patent infringement. (See Part II, Item 1, "Legal Proceedings") In these cases our customers have made claims against us and other suppliers for indemnification. We may become involved in similar litigation involving these and other customers in the future, including as a result of the Pace acquisition. These claims, regardless of their merit, could result in costly litigation, divert the time, attention and resources of our management, delay our product shipments, and, in some cases, require us to enter into royalty or licensing agreements. If a claim of patent infringement against us or our customer is successful and we fail to obtain a license or develop non-infringing technology, we or our customer may be prohibited from marketing or selling products containing the infringing technology which could materially affect our business and operating results. In addition, the payment of any damages or any necessary licensing fees or indemnification costs associated with a patent infringement claim could be material and could also materially adversely affect our operating results.

We have substantial goodwill and amortizable intangible assets.

Our financial statements reflect substantial goodwill and intangible assets, approximately $1,014.0 million and $810.4 million, respectively, as of December 31, 2015, that was recognized in connection with prior acquisitions and we expect to record significant additional goodwill and intangible assets as a result of the Pace acquisition.

We annually (and more frequently if changes in circumstances indicate that the asset may be impaired) review the carrying amount of our goodwill in order to determine whether it has been impaired for accounting purposes. In general, if the fair value of the corresponding reporting unit is less that the carrying amount of the reporting unit, we record an impairment. The determination of fair value is dependent upon a number of factors, including assumptions about future cash flows and growth rates that are based on our current and long-term business plans. With respect to the amortizable intangible assets, we test recoverability when events or changes in circumstances indicate that their carrying amounts may not be recoverable. Examples of such circumstances include, but are not limited to, operating or cash flow losses from the use of such assets or changes in our intended uses of such assets. If we determine that an asset or asset group is not recoverable, then we would record an impairment charge if the carrying amount of the asset or asset group exceeds its fair value. Fair value is based on estimated discounted future cash flows expected to be generated by the asset or asset group. The assumptions underlying cash flow projections would represent management's best estimates at the time of the impairment review.

While no goodwill or intangible asset impairments were recorded in 2015 or 2014, as the ongoing expected cash flows and carrying amounts of our remaining goodwill and intangible assets are assessed, changes in the economic conditions, changes to our business strategy, changes in operating performance or other indicators of impairment could cause us to realize impairment charges in the future, including as a result of restructuring undertaken in connection with the integration of the former Pace operations during 2016. For additional information, see the discussion under "Critical Accounting Policies" in Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations.

Pace was not subject to the internal controls and other compliance obligations of the U.S. securities laws, and we may not be able to timely and effectively implement controls and procedures over Pace operations as required under the U.S. securities laws.

Pace was not subject to the information and reporting requirements of the Exchange Act, and other U.S. federal securities laws, including the compliance obligations relating to, among other things, the maintenance of a system of internal controls as contemplated by the Exchange Act. We will need to timely and effectively implement the internal controls necessary to satisfy those requirements, which require an annual management assessment of the effectiveness of internal control over financial reporting. We intend to take appropriate measures to establish or implement an internal control environment at Pace aimed at successfully fulfilling these requirements. However, it is possible that we may experience delays in implementing or be unable to implement the required internal financial reporting controls and procedures, which could result in enforcement actions, the assessment of penalties and civil suits, failure to meet reporting obligations and other material and adverse events that could have a negative effect on the market price for our ordinary shares.

The Pace acquisition may not be accretive to our earnings and may cause dilution to our earnings per share, which may negatively affect the market price of our stock.

We currently anticipate that the Pace acquisition will be accretive to our non-GAAP earnings per share in 2016 and thereafter. This expectation is based on preliminary estimates that may materially change. We may encounter additional integration-related costs, may fail to realize all of the benefits anticipated in the acquisition or be subject to other factors that adversely affect preliminary estimates. Any of these factors could cause delay or significantly reduce the expected accretive effect of the acquisition and contribute to a decrease in the trading price of our stock.

The IRS may not agree that we are a foreign corporation for U.S. federal income tax purposes.

Although, following the Pace transaction, we are incorporated under the laws of England and Wales and are a tax resident in the United Kingdom for UK tax purposes, the IRS may assert that we should be treated as a U.S. corporation (and, therefore, a U.S. tax resident) for U.S. federal income tax purposes. For U.S. federal income tax purposes, a corporation generally is considered to be a tax resident in the jurisdiction of its organization or incorporation. Because we are incorporated under the laws of England and Wales, we generally would be classified as a non-U.S. corporation (and, therefore, a non-U.S. tax resident) under these rules. Section 7874 of the Internal Revenue Code of 1986, as amended (the "Code") however, provides an exception to this general rule under which a foreign incorporated entity may, in certain circumstances, be treated as a U.S. corporation for U.S. federal income tax purposes.

Generally, for us to be treated as a non-U.S. corporation for U.S. federal income tax purposes under Section 7874, the former stockholders of ARRIS must own (within the meaning of Section 7874) less than 80% (by both vote and value) of all of the outstanding shares of ARRIS International (the "Ownership Test"). Based on the terms of the Pace transaction, we believe historic ARRIS stockholders do own less than 80% of all of the outstanding shares in ARRIS International and, thus, the Ownership Test has been satisfied. However, ownership for purposes of Section 7874 is subject to various adjustments under the Code and the Treasury Regulations promulgated thereunder, and there is limited guidance regarding the Section 7874 provisions, including regarding the application of the Ownership Test. Thus, there can be no assurance that the IRS will agree with the position that the Ownership Test was satisfied following the Pace transaction and/or would not successfully challenge the status of ARRIS International as a non-U.S. corporation for U.S. federal income tax purposes.

If we were to be treated as a U.S. corporation for U.S. federal income tax purposes, we could be subject to substantial additional U.S. taxes. For UK tax purposes, we are expected, regardless of any application of Section 7874, to be treated as a UK tax resident. Consequently, if we are treated as a U.S. corporation for U.S. federal income tax purposes under Section 7874, we could be liable for both U.S. and UK taxes, which could have a material adverse effect on our financial condition and results of operations.

Our status as a foreign corporation for U.S. tax purposes could be affected by a change in law.

Under current law, we expect to be treated as a non-U.S. corporation for U.S. federal income tax purposes. However, changes to Section 7874 or the Treasury Regulations promulgated thereunder, or other changes in law, could adversely affect our status as a non-U.S. corporation for U.S. federal income tax purposes, our effective tax rate and/or future tax planning, and any such changes could have prospective or retroactive application to us and our stockholders.

Recent legislative proposals have aimed to expand the scope of Section 7874, or otherwise address certain perceived issues arising in connection with so-called inversion transactions. For example, proposals introduced by certain members of both houses of the U.S. Congress that, if enacted in their present form, would be effective retroactively to any transactions completed after May 8, 2014 would, among other things, treat a foreign acquiring corporation as a U.S. corporation under Section 7874 if the former stockholders of the U.S. corporation own more than 50% (by vote or value) of the shares of the foreign acquiring corporation after the transaction. These proposals, if enacted in their present form and if made retroactively effective, would cause us to be treated as a U.S. corporation for U.S. federal income tax purposes. It is presently uncertain whether any such legislative proposals or any other legislation relating to Section 7874 or so-called inversion transactions will be enacted into law and, if so, what impact such legislation would have on us.

In addition, the U.S. Treasury has indicated that it is considering regulatory action in connection with so-called inversion transactions. The specific timing and substance of any such action is presently uncertain. The regulations described in notices issued by the U.S. Treasury would, among other things, make it more difficult for the Ownership Test to be satisfied and would limit or eliminate certain tax benefits to so-called inverted corporations, including with respect to access to certain foreign earnings and/or the ability to restructure the non-U.S. members of the group. Although the promulgation of the Treasury Regulations described in the recently issued Treasury notices is not expected to materially affect our tax status, the precise scope and application of these regulatory proposals will not be clear until proposed Treasury Regulations are actually issued. Accordingly, until such regulations are promulgated and fully understood, we cannot be certain that such regulations would not have an adverse impact on us. Moreover, the notice also indicate that the U.S. Treasury and the IRS are considering issuing additional guidance, which in the case of "inverted groups" would be retroactive, to address certain transactions that have the effect of "shifting" U.S.-source earnings to lower-tax jurisdictions, including by limiting U.S. tax deductions for interest on certain intercompany debt obligations. Any such future guidance could have a material adverse impact on our financial position and results of operations.

Section 7874 of the Code may limit our ability to utilize certain U.S. tax attributes.

Following the acquisition of a U.S. corporation by a non-U.S. corporation, Section 7874 of the Code can limit the ability of the acquired U.S. corporation and its U.S. affiliates to utilize certain U.S. tax attributes (including net operating losses and certain tax credits) to offset, during the ten-year period following the acquisition, their U.S. taxable income, or related income tax liability, resulting from certain (a) transfers to related foreign persons of stock or other properties of the acquired U.S. corporation and its U.S. affiliates and (b) income received or accrued from related foreign persons during such period by reason of a license of any property by the acquired U.S. corporation and its U.S. affiliates (collectively, "inversion gain"). Based on the limited guidance available and as a result of the Pace transaction, we believe that this limitation under Section 7874 will apply and, as a result, we do not currently expect that the Company or its U.S. affiliates will be able to utilize certain U.S. tax attributes to reduce the amount of any inversion gain and/or to offset applicable U.S. federal income tax liability attributable to any inversion, but may continue to be used to reduce our taxable income from ordinary operations.

Products currently under development may fail to realize anticipated benefits.

Rapidly changing technologies, evolving industry standards, frequent new product introductions and relatively short product life cycles characterize the markets for our products. The technology applications that we currently are developing are subject to technological, supply chain, product development and other related risks that could delay successful delivery. The market in which we operate is subject to a rapid rate of technological change, reflected in increased development and manufacturing complexity and increasingly demanding customer requirements, all of which can result in unforeseen delivery problems. Even if the products in development are successfully brought to market, they may be late, may not be widely used or we may not be able to capitalize successfully on the developed technology. To compete successfully, we must quickly design, develop, manufacture and sell new or enhanced products that provide increasingly higher levels of performance and reliability. However, we may not be able to develop or introduce these products successfully if such products:

- are not cost-effective;
- are not brought to market in a timely manner;
- fail to achieve market acceptance; or
- fail to meet industry certification standards.

Furthermore, our competitors may develop similar or alternative technologies that, if successful, could have a material adverse effect on us. Our strategic alliances are generally based on business relationships that have not been the subject of written agreements expressly providing for the alliance to continue for a significant period of time and the loss of any such strategic relationship could have a material adverse effect on our business and results of operations.

Defects within our products could have a material impact on our results.

Many of our products are complex technology that include both hardware and software components. It is not unusual for software, especially in earlier versions, to contain bugs that can unexpectedly interfere with expected operations. While we employ rigorous testing prior to the shipment of our products, defects, including those resulting from components we purchase, may still occur from time to time. Product defects, including hardware failures, could impact our reputation with our customers which may result in fewer sales. In addition, depending on the number of products affected, the cost of fixing or replacing such products could have a material impact on our operating results. In some cases, we are dependent on a sole supplier for components used in our products. Defects in sole-sourced components subject us to additional risk of being able to quickly address any product issues or failures experienced by our customers as a result of the component defect and could delay our ability to deliver new products until the defective components are corrected or a new supplier is identified and qualified. This could increase our costs in resolving the product issue, result in decreased sales of the impacted product, or damage our reputation with customers, any of which could have the effect of negatively impacting our operating results.

Hardware or software defects could also permit unauthorized users to gain access to our customers' networks and/or a consumer's home network. In addition to potentially damaging our reputation with customers, such defects may also subject us to claims for damages under agreements with our customers and subject us to fines by regulatory authorities.

We offer warranties of various lengths to our customers on many of our products and have established warranty reserves based on, among other things, our historic experience, failure rates and cost to repair. In the event of a significant non-recurring product failure, the amount of the warranty reserve may not be sufficient. From time to time we may also make repairs on defects that occur outside of the provided warranty period. Such costs would not be covered by the established reserves and, depending on the volume of any such repairs, may have a material adverse effect on our results from operations or financial condition.

Our success depends on our ability to attract and retain qualified personnel in all facets of our operations.

Competition for qualified personnel is intense, and we may not be successful in attracting and retaining key personnel, which could impact our ability to maintain and grow our operations. Our future success will depend, to a significant extent, on the ability of our management to operate effectively. In the past, competitors and others have attempted to recruit our employees and their attempts may continue. The loss of services of any key personnel, the inability to attract and retain qualified personnel in the future or delays in hiring required personnel, particularly engineers and other technical professionals, could negatively affect our business.

We are dependent on a limited number of suppliers and inability to obtain adequate and timely delivery of supplies could have a material adverse effect on our business.

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. Likewise, we have only a limited number of potential suppliers for certain materials and hardware used in our products and a number of our agreements with suppliers are short-term in nature. Our reliance on sole or limited suppliers, particularly foreign suppliers, and our reliance on subcontractors involves several risks including a potential inability to obtain an adequate supply of required components, subassemblies, modules and other materials and reduced control over pricing, quality and timely delivery of components, subassemblies, modules and other products. An inability to obtain adequate deliveries or any other circumstance that would require us to seek alternative sources of supply could affect our ability to ship products on a timely basis which could damage relationships with current and prospective customers and potentially have a material adverse effect on our business. Our ability to ship products could also be impacted by country laws and/or union labor disruptions. For example the labor dispute involving union dock workers at certain U.S. west coast port facilities, in many cases, greatly increased the shipping time for our products arriving through the affected ports and also increase our shipping costs as we had to increase the number of products shipped using air freight which is significantly more expensive. Disputes of this nature may have a material impact on our financial results.

We are subject to the economic, political and social instability risks associated with doing business in certain foreign countries.

For the year ended December 31, 2015, approximately 28.7% of our sales were made outside of the United States. In addition, a significant portion of our products are manufactured or assembled in China, Mexico and Taiwan. As a result, we are exposed to risk of international operations, including:

- fluctuations in currency exchange rates;
- inflexible employee contracts or labor laws in the event of business downturns;
- compliance with United States and foreign laws concerning trade and employment practices;
- the challenges inherent in consistently maintaining compliance with the Foreign Corrupt Practice Act;
- the imposition of government controls;
- difficulties in obtaining or complying with export license requirements;
- labor unrest, including strikes, and difficulties in staffing;
- security concerns;
- economic boycott for doing business in certain countries;
- coordinating communications among and managing international operations;
- currency controls;
- changes in tax and trade laws that increase our local costs;
- exposure to heightened corruption risks; and
- reduced protection for intellectual property rights.

Political instability and military and terrorist activities may have significant impacts on our customers' spending in these regions and can further enhance many of the risks identified above. Any of these risks could impact our sales, interfere with the operation of our facilities and result in reduced production, increased costs, or both, which could have an adverse effect on our financial results.

We depend on channel partners to sell our products in certain regions and are subject to risks associated with these arrangements.

We utilize distributors, value-added resellers, system integrators, and manufacturers' representatives to sell our products to certain customers and in certain geographic regions to improve our access to these customers and regions and to lower our overall cost of sales and post-sales support. Our sales through channel partners are subject to a number of risks, including:

- ability of our selected channel partners to effectively sell our products to end customers;
- our ability to continue channel partner arrangements into the future since most are for a limited term and subject to mutual agreement to extend;
- a reduction in gross margins realized on sale of our products; and
- a diminution of contact with end customers which, over time, could adversely impact our ability to develop new products that meet customers' evolving requirements.

The import of our products is subject to trade regulations.

The import of our products into the United States and certain other countries is subject to the trade regulations in the countries where they are imported. Products may be subject to customs' duties that we pay to the applicable government agency and then collect from our customers in connection with the sale of the imported products. The amount of the customs duty owed, if any, is based on classification of the products within the applicable customs regulations. While we believe that our products have been properly classified, the U.S. Customs Agency or other applicable foreign regulatory agencies, may challenge our classifications and the amount of any duty payable. For example, we currently have a case pending in the U.S. Court of International Trade regarding the challenge by the U.S. Customs Agency with respect to certain digital television adapters that we import into the United States and believe are duty free. If it is ultimately determined that a product has been misclassified for customs purposes, we may be required to pay additional duties for products previously imported and we may not be successful in collecting the increased duty from the customer that purchased the products. In addition, we could be required to pay interest and/or fines to the applicable regulator, which amounts could be significant and negatively impact our results of operations. Further, if we do not comply with the applicable trade regulations, delivery of products to customers may be delayed which could negatively impact our sales and results of operations.

Our stock price has been and may continue to be volatile.

Our ordinary shares currently are traded on The NASDAQ Global Select Market. The trading price of our shares has been and may continue to be subject to large fluctuations. Our stock price may increase or decrease in response to a number of events and factors including:

- future announcements concerning us, key customers or competitors;
- quarterly variations in operating results;
- changes in financial estimates and recommendations by securities analysts;
- developments with respect to technology or litigation;
- the operating and stock price performance of our competitors; and
- acquisitions and financings.

Fluctuations in the stock market, generally, also impact the volatility of our stock price. General stock market movements may adversely affect the price of our ordinary shares, regardless of our operating performance.

Cyber-security incidents, including data security breaches or computer viruses, could harm our business by disrupting our delivery of services, damaging our reputation or exposing us to liability.

We receive, process, store and transmit, often electronically, the confidential data of our clients and others. Unauthorized access to our computer systems or stored data could result in the theft or improper disclosure of confidential information, the deletion or modification of records or could cause interruptions in our operations. These cyber-security risks increase when we transmit information from one location to another, including transmissions over the Internet or other electronic networks. Despite implemented security measures, our facilities, systems and procedures, and those of our third-party service providers, may be vulnerable to security breaches, acts of vandalism, software viruses, misplaced or lost data, programming and/or human errors or other similar events which may disrupt our delivery of services or expose the confidential information of our clients and others.

In addition, defects in the hardware or software we develop and sell could also result in unauthorized access to our customers' and/or consumers' networks. Any security breach involving the misappropriation, loss or other unauthorized disclosure or use of confidential information of our customers or others, whether by us or a third party, could (i) subject us to civil and criminal penalties, (ii) have a negative impact on our reputation, or (iii) expose us to liability to our customers, third parties or government authorities. Any of these developments could have a material adverse effect on our business, results of operations and financial condition. We have not experienced any such incidents that have had material consequences to date. We expect the U.S. and other countries to adopt additional cyber-security legislation that, if enacted, could impose additional obligations upon us that may negatively impact our operating results.

New regulations related to conflict minerals may adversely affect us

We are subject to the SEC disclosure obligations relating to our use of so-called "conflict minerals" — columbite-tantalite, cassiterite (tin), wolframite (tungsten) and gold. These minerals are present in substantially all of our products. We are required to file a report with the SEC annually covering our use of these materials and their source.

In preparing these reports, we are dependent upon information supplied by suppliers of products that contain, or potentially contain, conflict minerals. To the extent that the information that we receive from our suppliers is inaccurate or inadequate or our processes in obtaining that information do not fulfill the SEC's requirements, we could face reputational risks. Further, if in the future we are unable to certify that our products are conflict mineral free, we may face challenges with our customers, which could place us at a competitive disadvantage.

We do not intend to pay cash dividends in the foreseeable future.

We do not anticipate paying cash dividends on our ordinary shares in the foreseeable future. In addition, our ability to pay dividends is limited by the terms of our credit facilities. Payment of dividends in the future will depend on, among other things, business conditions, our results of operations, cash requirements, financial condition, contractual restrictions, provisions of applicable law and other factors that our board of directors may deem relevant.

As a result of shareholder voting requirements in the United Kingdom relative to Delaware, we have less flexibility with respect to certain aspects of capital management than we had as a Delaware corporation.

Prior to the Pace transaction, we were incorporated under Delaware law, which allowed our directors to authorize the issuance, without stockholder approval or any preemptive rights, of any shares authorized by our certificate of incorporation that were not already issued. Under English law, our directors may issue new ordinary shares up to a maximum amount equal to the allotment authority granted to the directors under our articles of association or by an ordinary resolution of our shareholders, subject to a five year limit on such authority. Additionally, subject to specified exceptions, English law grants preemptive rights to existing shareholders to subscribe for new issuances of shares for cash, but allows shareholders to waive these rights by way of a special resolution with respect to any particular allotment of shares or generally, subject to a five-year limit on such waiver. Our articles of association contain, as permitted by English law, a provision authorizing our Board to issue new shares for cash without preemptive rights. The authorization of the directors to issue shares without further shareholder approval and the authorization of the waiver of the statutory preemption rights must both be renewed by the shareholders at least every five years, and we cannot provide any assurance that these authorizations always will be approved, which could limit our ability to issue equity and, thereby, adversely affect the holders of our ordinary shares. While we do not believe that the differences between Delaware law and English law relating to our capital management will have a material adverse effect on us, situations may arise where the flexibility had under Delaware law would have provided benefits to our shareholders that is not be available under English law.

Any attempted takeovers of us will be governed by English law.

As a UK incorporated company, we are subject to English law. An English public limited company is potentially subject to the protections afforded by the Takeover Code if, among other factors, a majority of its directors are resident within the UK, the Channel Islands or the Isle of Man. We do not believe that the Takeover Code applies to us, and, as a result, our articles of association include measures similar to what may be found in the charters of U.S. companies, including the power for our Board to allot shares where in the opinion of the Board it is necessary to do so in the context of an acquisition of 20% or more of the issued voting shares in specified circumstances (this power is subject to renewal by our shareholders at least every five years and will cease to be applicable if the Takeover Code is subsequently deemed by the Takeover Panel to be applicable to ARRIS. Further, it could be more difficult for us to obtain shareholder approval for a merger or negotiated transaction because the shareholder approval requirements for certain types of transactions differ, and in some cases are greater, under English law than under Delaware law. The provisions of our articles of association and English law may have an anti-takeover impact on us and our ordinary shares.

Transfers of our ordinary shares, other than one effected by means of the transfer of book-entry interests in the Depository Trust Company ("DTC"), may be subject to UK stamp duty.

All of our outstanding shares are currently represented by book-entry interests in DTC. Transfers of our ordinary shares within DTC should not be subject to stamp duty or stamp duty reserve tax ("SDRT") provided no instrument of transfer is entered into and no election that applies to our ordinary shares is made or has been made by DTC or Cede under Section 97A FA 1986. In this regard DTC has confirmed that neither DTC nor Cede (its nominee) has made an election under section 97A of the Finance Act which would affect our shares issued to Cede, as part of the Pace transaction. If such an election is or has been made, transfers of our ordinary shares within DTC generally will be subject to SDRT at the rate of 0.5% of the amount or value of the consideration. Transfers of our ordinary shares held in certificated form generally will be subject to stamp duty at the rate of 0.5% of the consideration given (rounded up to the nearest £5). SDRT will also be chargeable on an agreement to transfer such shares, although such liability would be discharged if stamp duty is duly paid on the instrument of transfer implementing such agreement within a period of six years from the agreement. Subsequent transfer of our ordinary shares to an issuer of depository receipts or into a clearance system (including DTC) may be subject to SDRT at a rate of 1.5% of the consideration given or received or, in certain cases, the value of our ordinary shares transferred. The purchaser or transferee of the ordinary shares generally will be responsible for paying any stamp duty or SDRT payable.

If the UK were to exit from the European Union, our business could suffer a material adverse effect.

The UK recently announced that it will hold a referendum on June 23, 2016 related to its continued membership in the European Union. This referendum could introduce potentially significant new uncertainties and instability in financial and trade markets, both ahead of the date for any such referendum and, depending on the outcome, after the referendum.

Given the lack of precedent, it is unclear how a potential withdrawal of the UK from the European Union would affect the UK's access to the EU Single Market and other important financial and trade relationships and how it would affect us. A withdrawal could, among other outcomes, disrupt the free movement of goods, services and people between the UK and the European Union, undermine bilateral cooperation in key policy areas and significantly disrupt trade between the UK and the European Union. Under current European Union rules, following a withdrawal the UK would not be able to negotiate bilateral trade agreements with member countries of the European Union. In addition, a withdrawal of the UK from the European Union could significantly affect the fiscal, monetary and regulatory landscape within the UK and could have a material impact on its economy and the future growth of its various industries, including the broadcast and broadband communication systems industry in which we operate. Although it is not possible to predict fully the effects of a withdrawal of the UK from the European Union, if it were to occur it could have a material adverse effect on our business and our results of operations.

Item 1B. ***Unresolved Staff Comments***

No unresolved staff comments.

Item 2. ***Properties***

Our corporate headquarters are located in Suwanee, Georgia. We own sites in Apodaca, Mexico; Cary, North Carolina; Horsham, Pennsylvania; and Hsin Tien, Taiwan. We operate manufacturing and warehouse facilities, research and development, administrative and sales offices in various locations in the United States and in many foreign countries. These properties are generally used by each of our operating segments.

As of January 31, 2016, we have approximately 72 principal leased facilities, 32 of which are located in North America and 40 of which are located in other countries. Larger leased sites include properties location in

Bangalore, India; Beaverton, Oregon; Boca Raton, Florida; Linkoping, Sweden; Lisle, Illinois; Lowell, Massachusetts; Manaus, Brazil; Ontario, California; Paris, France; San Antonio, Texas; Santa Clara, California; San Diego, California; San Jose, California; Suwanee, Georgia; Tel Aviv, Israel; Tijuana, Mexico; Saltaire, United Kingdom; and Wallingford, Connecticut.

We believe that our existing facilities, including both owned and leased, are in good condition and suitable for the conduct of our business. We generally consider that the facilities are being appropriately utilized and that they have sufficient production capacity for their present intended purposes. The extent of utilization of such facilities varies from plant to plant and from time to time during the year. For additional information regarding our obligations under property leases, see Note 21 *Commitments and Contingencies* of Notes to the Consolidated Financial Statements.

Item 3. *Legal Proceedings*

We have been, and expect in the future to be a party to various legal proceedings, investigations or claims. In accordance with applicable accounting guidance, we record accruals for certain of our outstanding legal proceedings when it is probable that a liability will be incurred and the amount of loss can be reasonably estimated. We evaluate, at least on a quarterly basis, developments in our legal proceedings or other claims that could affect the amount of any accrual, as well as any developments that would result in a loss contingency to become both probable and reasonably estimable. When a loss contingency is not both probable and reasonably estimable, we do not record a loss accrual.

If the loss (or an additional loss in excess of any prior accrual) is reasonably possible and material, we disclose an estimate of the possible loss or range of loss, if such estimate can be made. The assessment whether a loss is probable or reasonably possible and whether the loss or a range of loss is estimable, involves a series of complex judgments about future events. Even if a loss is reasonably possible, we may not be able to estimate a range of possible loss, particularly where (i) the damages sought are substantial or indeterminate, (ii) the proceedings are in the early stages, or (iii) the matters involve novel or unsettled legal theories or a large number of parties. In such cases, there is considerable uncertainty regarding the ultimate resolution of such matters, including the amount of any possible loss. Accordingly, with respect to the proceedings described below, we are currently unable to reasonably estimate the possible loss or range of possible loss. However, because the results in litigation are unpredictable, an adverse resolution of one or more of such matters could have a material adverse effect on our business, financial position, results of operations or cash flows.

Due to the nature of our business, it is subject to patent infringement claims, including current suits against us or one or more of our wholly-owned subsidiaries or one or more of our customers who may seek indemnification from us. We believe that we have meritorious defenses to the allegation made in the pending cases and intend to vigorously defend these lawsuits; however, we are unable currently to determine the ultimate outcome of these or similar matters. In addition, we are a defendant in various litigation matters generally arising out of the normal course of business. Except as described below, ARRIS is not party to (nor have indemnification claims been made with respect to) any proceedings that are, or reasonably are expected to be, material to its business, results of operations or financial condition. However, since it is difficult to predict the outcome of legal proceedings, it is possible that the ultimate outcomes could materially and adversely affect our business, financial position, results of operations or cash flows. Accordingly, with respect to these proceedings, we are currently unable to reasonably estimate the possible loss or range of possible loss.

AIP v. MSOs, C.A. 12-cv-01690 et al., District of Delaware. On December 11, 2012, AIP filed several suits against service providers alleging infringement of four U.S. patents. The complaint requests unspecified damages for infringement and injunction against future infringement. Certain of our customers have requested that we provide indemnification. This case has been stayed pending Inter Partes Review at the Patent and Trademark Office. The Patent Trial and Appeals Board hearing the Inter Partes Review has ruled all claims of the patent are invalid. AIP appealed to the Court of Appeals for the Federal Circuit. To date, no evidence of infringement or damages has been introduced. It is premature to assess the likelihood of an unfavorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify one or more of the MSOs and/or pay damages for utilizing certain technology.

AT&T v. Cox, C.A. 14-cv-01106., District of Delaware. On August 28, 2014, AT&T sued Cox for infringement of eight U.S. patents. Cox has requested that we provide indemnification. The complaint requests unspecified damages for past and future infringement. To date, no evidence of damages has been introduced. It is premature to assess the likelihood of an unfavorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify the MSOs and/or pay damages for utilizing certain technology.

Bear Creek Technologies v. MSOs, C.A. 2:11-cv-00103, District of Delaware. On February 22, 2011, Bear Creek sued MSOs, telcos and other VoIP service providers for infringement of US Patent No. 7,889,722, relating to EMTAs. Certain of our customers have requested that we provide indemnification. The complaint requests unspecified damages for past infringement and injunction against future infringement. This case has been stayed pending reexamination of the patent by the United States Patent and Trademark Office. In reexamination the Patent and Trademark Office held all claims invalid, and an appeal of that holding is currently pending with the Patent Trial and Appeals Board. To date, no evidence of damages has been introduced. It is premature to assess the likelihood of an unfavorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify the MSOs and/or pay damages for utilizing certain technology.

Broadband iTV v. Time Warner Cable (TWC) et al., C.A. 1:14-cv-00169, District of Hawaii. On April 9, 2014, Broadband iTV filed suit against TWC alleging infringement of U.S. Patent No. 7,631,336 relating to media sharing. TWC has requested that we provide indemnification. The complaint requests unspecified damages for past infringement and an injunction. It is premature to assess the likelihood of an unfavorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify TWC and/or pay damages for utilizing certain technology.

C-Cation v. ARRIS et al., C.A. 14-cv-00059, Eastern District of Texas; C-Cation v. Atlantic Broadband et al., C.A. 15-cv-00295, District of Delaware. On February 4, 2014, C-Cation filed suit against TWC, ARRIS, Cisco and Casa alleging infringement of U.S. Patent No. 5,563,883 relating to channel management. On April 7, 2015, C-Cation filed an additional suit against several remaining MSOs alleging infringement of the same patent. Certain of our customers have requested that we provide indemnification. An Inter Partes Review request filed by ARRIS on the claims asserted in the litigation has been instituted and a hearing will be scheduled to assess invalidity of the claims. The litigation has been stayed pending conclusion of the Inter Partes Review proceeding. The asserted patent expired in 2014 and the complaint requests unspecified damages for past infringement. It is premature to assess the likelihood of an unfavorable outcome. In the event of an unfavorable outcome, ARRIS may be required to pay damages for utilizing certain technology.

ChanBond v. MSOs, C.A. 15-cv-00848, et al, District of Delaware (RGA). On September 21, 2015, ChanBond filed suit against several MSOs alleging infringement of three US Patents. Certain of our customers have requested that we provide indemnification. The complaint requests unspecified damages for infringement and injunction against future infringement. To date, no evidence of infringement or damages has been introduced. It is premature to assess the likelihood of an unfavorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify the MSOs and/or pay damages for utilizing certain technology.

Pace c/ Copie France, RG N°14/02114, Court of First Instance of Nanterre (*Tribunal de Grande Instance de Nanterre*). On August 17, 2015, Copie France filed suit against Pace France and Sagemcom Broadband SAS, on a subsidiary basis, in connection with a litigation matter against Canal+, claiming the collection of private copy levies for allegedly misclassified devices put into service by Canal+. By filing suit on a subsidiary basis against Pace France, it will permit Copie France to seek recovery from Pace France in the event its claims against Canal+ are rejected. It is premature to assess the likelihood of an unfavorable outcome. In the event of an unfavorable outcome, an ARRIS subsidiary may be required to pay damages to Copie France.

Dragon Intellectual Property v. MSOs, C.A. 13-cv-02069; 13-cv-02063, etc., District of Delaware (RGA). On December 20, 2013, Dragon IP filed suit against several MSOs alleging infringement of US Patent No. 5,930,444. Certain of our customers have requested that we provide indemnification. The complaint requests unspecified damages for infringement and injunction against future infringement. A Petition for Inter Partes Review of the asserted patent has been instituted against the patent. The Patent Trials and Appeals Board has now ruled all instituted claims to be invalid. To date, no evidence of infringement or damages has been introduced. It is premature to assess the likelihood of an unfavorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify the MSOs and/or pay damages for utilizing certain technology.

Intellectual Ventures I and II v. AT&T, CenturyLink, C.A. 12-cv-00193, 13-cv-01631, etc. District of Delaware. On February 16, 2012, Intellectual Ventures filed a claim against AT&T alleging infringement of several US patents. Certain of our customers have requested that we provide indemnification. The complaint requests damages for past and future infringement. To date, no evidence of infringement or damages has been introduced. It is premature to assess the likelihood of an unfavorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify AT&T and/or pay damages for utilizing certain technology.

MediaTube et al v. Bell Canada et al, C.A. T-705-13, Canadian Federal Court. On April 23, 2013, MediaTube Corp. filed a claim against Bell Canada entities alleging infringement of a Canadian patent. The complaint requests damages for past and future infringement. To date, no evidence of infringement or damages has been introduced. It is premature to assess the likelihood of an unfavorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify Bell Canada and/or pay damages for utilizing certain technology.

Mobile Telecommunications Technologies v. MSOs, C.A. 16-cv-00007, 16-cv-0013, etc., Eastern District of Texas. On January 4, 2016, Mobile Telecommunications Technologies (M-Tel) filed suit against several MSOs alleging infringement of three expired U.S. patents alleged to cover various Wi-Fi functionality. Certain of our customers have requested that we provide indemnification. The complaint requests unspecified damages for past infringement. To date, no evidence of infringement or damages has been introduced. It is premature to assess the likelihood of an unfavorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnity one or more MSOs and/or pay damages for utilizing certain technology.

Quantum Stream v. DirecTV, C.A. 15-cv-08240., Southern District of New York. On October 20, 2015, Quantum Stream filed suit against DirecTV alleging infringement of two U.S. patents alleged to cover provision of video content and addressable advertising. DirecTV has asked that we indemnify. The complaint requests unspecified damages for past infringement and an injunction against future infringement. To date, no evidence of infringement or damages has been introduced. It is premature to assess the likelihood of an unfavorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnity one or more MSOs and/or pay damages for utilizing certain technology.

Sprint Communications v. MSOs, C.A. 11-cv-2686, District of Kansas. On December 19, 2011, Sprint filed suit against several MSOs alleging infringement of several patents alleged to cover various aspects of voice services. Certain of our customers have requested that we provide indemnification. The complaint requests unspecified damages for past infringement and injunction against future infringement. To date, no evidence of damages has been introduced. It is premature to assess the likelihood of an unfavorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify the MSOs and/or pay damages for utilizing certain technology. With respect to any liability attributable to Motorola Home in this matter, a subsidiary of Google has agreed to indemnify ARRIS.

Sony Corp. v. Pace plc et al., C.A. 15-cv-00288, District of Delaware. On April 1, 2015, Sony filed suit against Pace alleging infringement of six U.S. Patents alleged to cover various features of the set top box. The complaint requests unspecified damages for past infringement and injunction against future infringement. To date, no evidence of infringement or damages has been introduced. It is premature to assess the likelihood of an unfavorable outcome. In the event of an unfavorable outcome, ARRIS may be required to pay damages for utilizing certain technology.

TQ Delta v. MSOs, C.A. 15-cv-00611; 15-cv-00615, etc., District of Delaware. On July 17, 2015, TQ Delta filed suit against several MSOs alleging infringement of several U.S. patents. Certain of our customers have requested that we provide indemnification. The complaint requests unspecified damages for past and future infringement. To date, no evidence of infringement or damages has been introduced. It is premature to assess the likelihood of an unfavorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify the MSOs and/or pay damages for utilizing certain technology.

TQ Delta v. 2Wire Inc., C.A. 13-cv-01835, District of Delaware. On November 4, 2013, TQ Delta filed suit against 2Wire alleging infringement of several U.S. patents. The complaint requests unspecified damages for past infringement and an injunction against future infringement. To date, no evidence of infringement or damages has been introduced. It is premature to assess the likelihood of an unfavorable outcome. In the event of an unfavorable outcome, ARRIS may be required to pay damages for utilizing certain technology.

Two Way Media v. Bell Canada et al, C.A. T-809-14, Canadian Federal Court. On April 2, 2014, Two Way Media filed a claim against Bell Canada entities alleging infringement of a Canadian patent. Bell Canada has requested that we provide indemnification. The complaint requests damages for past and future infringement. To date, no evidence of infringement or damages has been introduced. It is premature to assess the likelihood of an unfavorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify Bell Canada and/or pay damages for utilizing certain technology.

United Access Technologies v. AT&T, C.A. 11-cv-00338, District of Delaware. On April 15, 2011, United Access Technologies filed suit against AT&T alleging infringement of three U.S. patents. The complaint requests unspecified damages for past and future infringement. To date, no evidence of infringement or damages has been introduced. It is premature to assess the likelihood of an unfavorable outcome. In the event of an unfavorable outcome, ARRIS may be required to indemnify AT&T and/or pay damages for utilizing certain technology.

In the acquisition agreement entered into in connection with the acquisition of the Motorola Home business, a subsidiary of Google agreed to indemnify, defend and hold harmless ARRIS and various related parties with respect to, among other things, any losses suffered by ARRIS as a result of a court order involving, or the settlement of, certain agreed-upon litigation, including the Sprint lawsuit described above that reference this indemnification obligation. There are various limitations upon this obligation.

From time to time third parties demand that we or our customers enter into a license agreement with respect to patents owned, or allegedly owned, by the third parties. Such demands cause us to dedicate time to study the patents and enter into discussions with the third parties regarding the merits and value, if any, of the patents. These discussions, may materialize into license agreements or patent claims asserted against us or our customers. If asserted against our customers, our customers may request indemnification from us. It is not possible to determine the impact of any such demands and the related discussions on ARRIS's business, results of operations or financial condition.

Item 4. ***Mine Safety Disclosures***

Not Applicable

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Item 4A. ***Executive Officers and Board Committees***

Executive Officers of the Company

The following table sets forth the name, age as of February 29, 2016, and position of our executive officers.

Name	Age	Position
Robert J. Stanzione	68	President and Chief Executive Officer, Chairman of the Board
David B. Potts	58	Executive Vice President, Chief Financial Officer
Lawrence A. Margolis	68	Executive Vice President, Corporate Strategy and Administration
Bruce W. McClelland	49	President, Network & Cloud
Lawrence Robinson	48	President, Customer Premises Equipment
Ronald M. Coppock	61	President, International Sales and Global Marketing
Tim O'Loughlin	42	President, North American Sales
Phil Baldock	40	Senior Vice President, Chief Information Officer
James R. Brennan	54	Senior Vice President, Supply Chain & Quality
Victoria P. Brewster	53	Senior Vice President, Human Resources
Patrick W. Macken	42	Senior Vice President, General Counsel and Secretary

Robert J. Stanzione has been Chief Executive Officer since 2000. In 1995, Mr. Stanzione was appointed President & CEO of ARRIS Interactive, LLC, a Nortel Networks/ANTEC joint venture. As ARRIS Interactive's first CEO, Mr. Stanzione grew the venture from a start-up company to the world market leader in cable telephony products. In 1998 he became President, Chief Operating Officer and a Director of ANTEC and was appointed to the CEO role on January 1, 2000. In 2001, ANTEC acquired Nortel's share of ARRIS Interactive and re-named the Company ARRIS Group, Inc. Under Mr. Stanzione's leadership, ARRIS continued to invest in opportunities to significantly expand the business, including the 2013 acquisition of Motorola Mobility's Home business and the 2016 acquisition of Pace, which created a new entity, ARRIS International plc. From 1969 to 1995, before joining ARRIS, Mr. Stanzione held a wide range of senior management positions with AT&T.

Mr. Stanzione holds a Bachelor's degree in Mechanical Engineering from Clemson University, a Master's degree in Industrial Engineering from North Carolina State University and has completed executive development programs at the University of Richmond, Babson College and the International Institute for Management Development in Switzerland.

Mr. Stanzione is a Board Member of the National Cable & Telecommunications Association (NCTA). In June 2012, he was named to serve on The Cable Center Board of Directors. Mr. Stanzione was awarded the SCTE's Chairman's Award in 2008, the Vanguard Award for Associates & Affiliates in 2009, and was inducted into the Cable TV Pioneers in 2010. He is a member of the Class of 2016 Cable Hall of Fame and also serves as a Trustee on the Committee for Economic Development in Washington, D.C.

David B. Potts has been the Chief Financial Officer since 2004. Prior to joining ARRIS, Mr. Potts was Chief Financial Officer of ARRIS Interactive L.L.C. and held various executive management positions with Nortel Networks, including Vice President and Chief Financial Officer of Bell Northern Research and Vice President of Mergers and Acquisitions. Prior to Nortel Networks, Mr. Potts was with Touche Ross in Toronto.

Mr. Potts holds a Bachelor of Commerce degree from Lakehead University in Canada and is a member of the Institute of Chartered Accountants in Canada.

Lawrence A. Margolis is Executive Vice President, Corporate Strategy and Administration of the Company. In his role, Mr. Margolis has played an integral role in past joint ventures and the creation and operation of ARRIS acquisitions. Mr. Margolis has operating management responsibility for Corporate Strategy and Business Development functions of the Company.

Mr. Margolis was previously Executive Vice President, Law and Administration and Secretary of ARRIS and previous to that Chief Financial Officer of ARRIS. Prior to ARRIS, he held executive positions with Anixter, Inc., a global communications products distribution company, including Vice President, General Counsel and Secretary. Mr. Margolis was previously a partner at the law firm of Schiff Hardin & Waite.

Mr. Margolis holds a Bachelor's degree in English Literature from the University of Kansas and a Juris Doctor from the University of Michigan Law School.

Bruce W. McClelland is President of Network & Cloud and Global Services. Mr. McClelland is responsible for overseeing the Company's leading portfolio of network technologies including CCAP, CMTS, QAM, Video Processing and Wireline technologies. Mr. McClelland's portfolio also features the Company's expanding Software Solutions, which include multi-screen support, targeted advertising, personalized content, whole-home technologies, as well as Global Services.

Most recently, Mr. McClelland was ARRIS's Group President, for Products and Services, after leading the Customer Premises Equipment Unit as Vice President and General Manager. McClelland joined the Company as Vice President of Engineering, responsible for development of a broad range of voice and data cable TV products.

Prior to ARRIS, Mr. McClelland was responsible for the development of Nortel's Signaling System #7 and Signal Transfer Point product lines as well as several development roles within Nortel's Class 4/5 DMS switching product line.

Mr. McClelland serves on the board and as Chairman of ActiveVideo, LLC, based in San Jose, California, and joint venture initiative between ARRIS and Charter Communications. Mr. McClelland also serves on the board of Benu Networks, based in Billerica, Massachusetts.

Mr. McClelland received a Bachelor of Electrical Engineering from the University of Saskatchewan.

Lawrence Robinson is President, Customer Premises Equipment, which comprises in-home video solutions including digital cable set-tops, satellite receivers, and IP-based TV products, as well as a comprehensive portfolio of broadband devices incorporating the latest in DOCSIS, DSL, and fiber technologies.

Mr. Robinson assumed his current role after the ARRIS acquisition of Motorola Mobility's Home business where he was Senior Vice President and General Manager of the Home Devices business responsible for its video, voice and data product portfolio, including set-tops, modems and gateways. Mr. Robinson brings more than a decade of experience in the broadband and video industry, including roles in general management, product management and business development.

While at Motorola, Mr. Robinson held a variety of senior level positions including Corporate Vice President, Product Management in the Digital Video Solutions Group. In this role, he led the definition and management of digital cable and satellite set-tops product lines for the Americas' market. Robinson also managed strategic partnerships that complemented the portfolio.

In addition to his broadband and video industry experience, Mr. Robinson brings more than a decade of experience in large scale, aerospace communications systems, in addition to management consulting experience with PricewaterhouseCoopers, LLP.

Mr. Robinson holds a Master's degree in Technology Management from the University of Pennsylvania and a Bachelor's degree in Electrical Engineering from the Catholic University of America.

Ronald M. Coppock is President of International Sales and Global Marketing at ARRIS. In this role, Mr. Coppock leads International Sales, reflecting the Company's focus on global growth. He also runs global marketing and sales operations. Mr. Coppock assumed his current role after the acquisition of Pace. Previously, Coppock served as President of Worldwide Sales and Marketing at ARRIS. In this role, he was responsible for worldwide sales and marketing.

Prior to joining ARRIS, Mr. Coppock held various sales and marketing positions such as Senior Vice President International, TSX Texscan; Director of Marketing for Westcott Communications Private Television Networks; Western Regional Manager, Scientific-Atlanta Network Systems and Satellite Communications Group;

Director National Accounts at Pioneer; and various positions at Pioneer Communications and Oak Communications. Mr. Coppock received a Bachelor's degree in Business Administration & Marketing from Auburn University. He is an active member of the American Marketing Association, Auburn School of Business Alumni Association and serves on the Cystic Fibrosis Foundation Board. Coppock is also a member of the Cable TV Pioneers.

Tim O'Loughlin is President, North American Sales at ARRIS. Mr. O'Loughlin assumed his current role after the acquisition of Pace. Previously, he served as President of Pace Americas, overseeing the United States and Canada.

Mr. O'Loughlin joined Pace in March 2001 as part of the marketing team and served in various roles including Senior Vice President of Sales and Customer Support, Vice President of Business Development, and Vice President of Sales and Marketing. He was an instrumental part of Pace's expansion throughout the cable, telecommunications, and satellite industries.

Prior to joining Pace, Mr. O'Loughlin held strategic marketing positions in the hospitality and telecom industries. He holds a Bachelor's degree in Business Administration and an MBA from Florida Atlantic University.

Phil Baldock is Senior Vice President, Chief Information Officer at ARRIS. Mr. Baldock assumed his current role after the acquisition of Pace. He is responsible for developing ARRIS's IT strategy to deliver increased operating performance and productivity. Previously, Mr. Baldock served as Senior Vice President of Business Operations at Pace, overseeing Manufacturing Strategy, Procurement, Quality and Business Systems. He was also responsible for Pace's supplier relationships and acted in a governance capacity, ensuring Pace met its corporate social responsibility obligations.

Mr. Baldock joined Pace in 1997 as a Financial Accountant at the Company's UK headquarters. In 2005, he transferred to the Pace Americas office in Boca Raton, FL where his roles included Product Manager, Director of Commercial Operations and VP, Customer Support.

Mr. Baldock qualified as a Chartered Management Accountant in the UK and holds a Bachelor's Degree in Accounting from Glasgow Caledonian University and an MBA from the University of Florida

James R. Brennan is Senior Vice President of Supply Chain and Quality and responsible for leading the supply chain, quality and operation services and solutions that deliver financial results, customer satisfaction and industry leading practices.

Mr. Brennan held a similar role as the Corporate Vice President of Supply Chain and Quality for the Motorola Mobility's Home business. He served in various executive positions at Motorola, including Vice President Business Transformation and Chief Quality Officer and Corporate Vice President of the Home Networks Mobility supply chain, which included global operations associated with planning, purchasing, new product introduction, manufacturing, customer fulfillment and repair. Mr. Brennan also served in other senior leadership positions, including strategy, business operations, IT, and mergers and acquisitions.

Prior to joining Motorola in 2000, Mr. Brennan held leadership positions at General Instrument in Operations and Northrop Grumman/Vought Aircraft in engineering development, manufacturing, flight test operations and quality.

Mr. Brennan earned a Bachelor's degree in Mechanical Engineering from Old Dominion University. He also completed the University of Pennsylvania's Wharton School and the University of Michigan's executive programs.

Vicki P. Brewster is Senior Vice President of Human Resources, where she leads global people strategies that enable growth, energize the culture, and create an employee competitive advantage for ARRIS.

Ms. Brewster has held leadership HR roles at ARRIS for nearly a decade, managing global business-critical functions including talent acquisition, compensation, benefits, HR systems, talent management, and employee relations. Her work includes leading the HR integration of strategic ARRIS acquisitions including Motorola Home. Prior to joining ARRIS, Ms. Brewster held senior leadership roles at S1 Corporation, NDCHealth, WebMD, and HBO & Company.

Ms. Brewster holds a Bachelor's degree in Industrial Relations and Psychology from the University of North Carolina at Chapel Hill.

Patrick W. Macken is Senior Vice President, General Counsel and Secretary. In this role, he oversees all aspects of the Company's legal function. Mr. Macken joined ARRIS from Troutman Sanders LLP, where he served as partner in the firm's Corporate Group, providing legal counsel and support to ARRIS for more than 10 years. His legal expertise spans securities law, mergers and acquisitions, capital markets, commercial law and corporate governance.

Mr. Macken holds a Bachelor's Degree and a Juris Doctorate from Tulane University.

Board Committees

Our Board of Directors has three permanent committees: Audit, Compensation, and Nominating & Corporate Governance. The charters for all three committees are located on our website at www.arris.com. The Board believes that each of its members, with the exception of Mr. Stanzione, is independent, as defined by the SEC and NASDAQ rules. The Board has identified Harry L. Bosco as the lead independent director. Additionally, the Board has identified Doreen A. Toben as an audit committee financial expert.

PART II

Item 5. *Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities*

ARRIS's stock is traded on the NASDAQ Global Select Market under the symbol "ARRS." The following table reports the high and low trading prices per share of our stock as listed on the NASDAQ Global Market System:

	High	Low
2014		
First Quarter	$31.42	$23.38
Second Quarter	34.22	24.76
Third Quarter	35.83	28.22
Fourth Quarter	30.99	23.71
2015		
First Quarter	$31.45	$25.64
Second Quarter	37.50	28.57
Third Quarter	32.01	24.46
Fourth Quarter	32.93	25.80

We have not paid cash dividends on our stock since our inception.

As of January 31, 2016, there was one record holder of our ordinary shares (with approximately 41,000 beneficial holders.) This number excludes shareholders holding stock under nominee or street name accounts with brokers or banks.

Issuer Purchases of Equity Securities

The table below sets forth the purchases of ARRIS stock for the quarter ended December 31, 2015:

Period	Total Number of Shares Purchased(1)	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs (in thousands)
November 2015	102	$29.72	—	144,630
December 2015	483,512	$29.42	—	144,630

(1) Includes approximately 483,614 shares repurchased to satisfy tax withholding obligations that arose on the vesting of shares of restricted stock units.

Our board of directors previously authorized share repurchase plans, in May 2011 and October 2012, pursuant to which we could purchase up to an aggregate of $300.0 million of our common stock. In connection with our acquisition of Motorola Home in 2013, we suspended making any repurchases under the approved plans, but the plans were not terminated and have not expired. No repurchases have been made under this plan in 2013 and 2014.

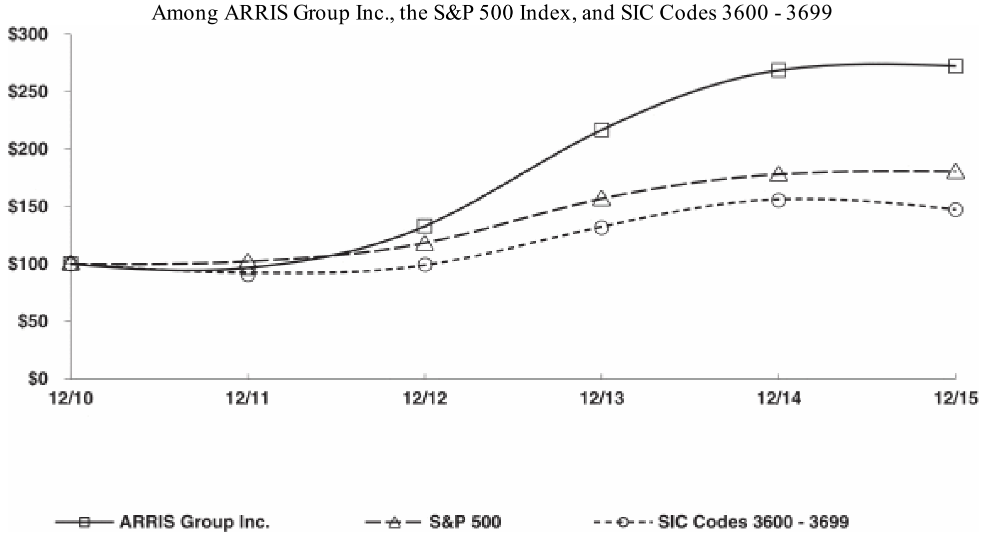
During the first quarter of 2015, we repurchased 0.9 million shares of our common stock for $25.0 million at an average stock price of $28.70.

In early 2016, our Board of Directors approved a new $300.0 million share repurchase authorization replacing all prior programs. Unless terminated earlier by a Board resolution, this new plan will expire when ARRIS has used all authorized funds for repurchase.

Stock Performance Graph

Below is a graph comparing total stockholder return on the Company's stock from December 31, 2010 through December 31, 2015, with the Standard & Poor's 500 and the Index of NASDAQ U.S. Stocks of entities in the industry of electronics and electrical equipment and components, exclusive of computer equipment (SIC 3600-3699), prepared by the Research Data Group, Inc.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*
Among ARRIS Group Inc., the S&P 500 Index, and SIC Codes 3600 - 3699



*$100 invested on 12/31/10 in stock or index, including reinvestment of dividends.
Fiscal year ending December 31.

	12/10	12/11	12/12	12/13	12/14	12/15
ARRIS Group Inc.	**100.00**	**96.43**	**133.16**	**216.93**	**269.07**	**272.46**
S&P 500	**100.00**	**102.11**	**118.45**	**156.82**	**178.29**	**180.75**
SIC Codes 3600 — 3699	**100.00**	**92.26**	**98.80**	**132.65**	**156.62**	**147.62**
Copyright© 2016 Standard & Poor's, a division of McGraw Hill Financial. All rights reserved. (www.researchdatagroup.com/S&P.htm)						

Notwithstanding anything to the contrary set forth in any of our filings under the Securities Act of 1933, or the Securities Exchange Act of 1934 that might incorporate future filings, including this Annual Report on Form 10-K, in whole or in part, the Performance Graph presented above shall not be incorporated by reference into any such filings.

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Item 6. ***Selected Consolidated Historical Financial Data***

The selected consolidated financial data as of December 31, 2015 and 2014 and for each of the three years in the period ended December 31, 2015 set forth below are derived from the accompanying audited consolidated financial statements of ARRIS, and should be read in conjunction with such statements and related notes thereto. The selected consolidated financial data as of December 31, 2013, 2012, and 2011 and for the years ended December 31, 2012 and 2011 is derived from audited consolidated financial statements that have not been included in this filing. The historical consolidated financial information is not necessarily indicative of the results of future operations and should be read in conjunction with ARRIS's historical consolidated financial statements and the related notes thereto and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this document.

On April 17, 2013, we completed our acquisition of Motorola Home and applied the acquisition method of accounting for the business combination. The selected balance sheet data as of December 31, 2013 represents the consolidated statement of financial position of the combined company. The consolidated operating data for the year ended December 31, 2013 includes approximately eight months of operating results of the combined company. No results from our acquisition of Pace, which was completed on January 4, 2016, are included below.

See Note 23 *Summary Quarterly Consolidated Financial Information* of the Notes to the Consolidated Financial Statements for a summary of our quarterly consolidated financial information for 2015 and 2014 (in thousands, except per share data).

	2015	2014	2013	2012	2011
Consolidated Operating Data:					
Net sales	$4,798,332	$5,322,921	$3,620,902	$1,353,663	$1,088,685
Cost of sales	3,379,409	3,740,425	2,598,154	891,086	678,172
Gross margin	1,418,923	1,582,496	1,022,748	462,577	410,513
Selling, general, and administrative expenses	417,085	410,568	338,252	161,338	148,755
Research and development expenses	534,168	556,575	425,825	170,706	146,519
Amortization of intangible assets	227,440	236,521	193,637	30,294	33,649
Integration, acquisition, restructuring and other costs	29,277	37,498	83,047	12,968	7,565
Impairment of goodwill & intangibles	—	—	—	—	88,633
Operating income (loss)	210,953	341,334	(18,013)	87,271	(14,608)
Interest expense	70,936	62,901	67,888	17,797	16,939
Loss (gain) on investments	6,220	10,961	2,698	(1,404)	1,570
Loss (gain) on foreign currency	20,761	2,637	(3,502)	786	(580)
Interest income	(2,379)	(2,590)	(2,936)	(3,242)	(3,154)
Other expense (income), net	8,362	28,195	13,989	(962)	(872)
Income (loss) before income taxes	107,053	239,230	(96,150)	74,296	(28,511)
Income tax expense (benefit)	22,594	(87,981)	(47,390)	20,837	(10,849)
Consolidated net income (loss)	84,459	327,211	(48,760)	53,459	(17,662)
Net loss attributable to noncontrolling interest	(7,722)	—	—	—	—
Net income (loss) attributable to ARRIS Group, Inc.	$ 92,181	$ 327,211	$ (48,760)	$ 53,459	$ (17,662)
Basic	$ 0.63	$ 2.27	$ (0.37)	$ 0.47	$ (0.15)
Diluted	$ 0.62	$ 2.21	$ (0.37)	$ 0. 46	$ (0.15)
Selected Balance Sheet Data:					
Total assets	$4,518,603	$4,341,042	$4,287,129	$1,404,935	$1,359,613
Long-term obligations	$1,655,012	$1,646,604	$1,880,594	$ 74,385	$ 285,552

Item 7. ***Management's Discussion and Analysis of Financial Condition and Results of Operations***

Overview

ARRIS International plc is a world leader in entertainment and communications technology. Our innovations combine hardware, software, and services across the cloud, network, and home to power TV and Internet for millions of people around the globe. The people of ARRIS collaborate with the world's top service providers, content providers, and retailers to advance the state of our industry and pioneer tomorrow's connected world.

We are headquartered in Suwanee, Georgia. We operate in two business segments: Customer Premises Equipment ("CPE") and Network & Cloud ("N&C"). We enable service providers including cable, telephone, and digital broadcast satellite operators and media programmers to deliver media, voice, and IP data services to their subscribers. We are a leader in set-tops, digital video and Internet Protocol Television ("IPTV") distribution systems, broadband access infrastructure platforms, and associated data and voice CPE, which we also sell directly to consumers through retail channels. Our solutions are complemented by a broad array of services including technical support, repair and refurbishment, and system design and integration.

On January 4, 2016, ARRIS Group, Inc. completed its Combination with Pace, a company incorporated in England and Wales. In connection with the Combination, (i) ARRIS International plc, a company incorporated in England and Wales, acquired all of the outstanding ordinary shares of Pace and (ii) a wholly owned subsidiary of ARRIS International was merged with and into ARRIS Group, with ARRIS Group surviving the Merger as an indirect wholly owned subsidiary of ARRIS International. Under the terms of the Combination, (a) Pace shareholders received 132.5 pence in cash and 0.1455 ordinary shares of ARRIS International for each Pace Share they held, and (b) ARRIS Group stockholders received one ordinary share of ARRIS International for each share of ARRIS Group common stock they held.

Following the Combination, both ARRIS Group and Pace became indirect wholly-owned subsidiaries of ARRIS International. The ordinary shares of ARRIS International trade on The NASDAQ Stock Market LLC under the symbol "ARRS." In addition, while ARRIS International is incorporated under the laws of England and Wales, our corporate headquarters remain in Suwanee, Georgia. Following the Combination, we continue to operate in two business segments with the former Pace products included in our Network & Cloud and Consumer Premises Equipment Segments. As a result of the Combination not being completed until after the end of the 2015 fiscal year, except as specifically noted below, the results described below relate only to ARRIS Group.

Business and Financial Highlights:

Business Highlights

- Announced the acquisition of Pace which closed in January 2016.
- Formed a new venture with Charter Communications acquiring ActiveVideo Networks, in April 2015.
- Continued international expansion, most notably with new business with NBN in Australia and Liberty Global in Europe.
- Leading market position in several key product areas, including CMTS, video and broadband gateways.
- Amended our credit agreement in June 2015 providing for improved terms and conditions and the necessary funding for the cash component of the Pace acquisition

Financial Highlights

- Sales in 2015 were $4,798.3 million as compared to $5,322.9 million in 2014, a decrease of 9.9% reflecting continued service provider growth challenges, particularly with our telco customers.
- International sales increased 1.0% from the prior year despite the adverse impact related to the strengthening of the U.S. dollar through 2015.

- Gross margin percentage was 29.6% in 2015, compared to 29.7% in 2014.
- Total operating expenses (excluding amortization of intangible assets, integration, acquisition, restructuring and other costs) in the 2015 were $951.3 million, as compared to $967.1 million in the same period last year.
- We ended 2015 with $879.1 million of cash, cash equivalents, and marketable security investments, which compares to $697.4 million at the end of 2014. We generated approximately $343.9 million of cash from operating activities in 2015 and $459.3 million during 2014.
- We ended 2015 with long-term debt of $1,509.1 million, at face value, the current portion of which is $49.5 million. We repaid $38.5 million of our Term Loans under our credit facility and $15 million of indebtedness related to ActiveVideo in 2015.
- During 2015, we used $25.0 million of cash to repurchase 0.9 million shares of our common stock at an average price of $28.70 per share.

Industry Conditions

Global macro-economic conditions improved in 2015 over the historically low levels experienced since 2007, although the U.S. and many other international markets we serve saw only modest growth. We expect to see further limited economic growth in many of our markets in 2016 notwithstanding the continuing global economic uncertainty. We believe this economic uncertainty will continue to influence the capital expenditure strategy of many of our customers and, as a result, we expect only modest growth in the overall capital expenditure in the markets we serve in 2016.

Consolidation of Customers Has Occurred and May Continue — Altice completed its acquisition of Suddenlink in December 2015 and has announced its intent to acquire Cablevision. Liberty Global is moving forward with its plans to acquire Cable & Wireless. While Comcast is no longer in contract to acquire Time Warner Cable, Charter has announced its intent to acquire both Time Warner Cable and Brighthouse. Meanwhile, AT&T acquired DIRECTV in July 2015, and in February 2015 Verizon announced its intention to sell certain properties to Frontier Communications. We believe our acquisition of Pace positions us favorably to capitalize on this consolidation through a broader portfolio, global scale, and leadership in many of the platforms and components that these providers depend on to deliver services. The impact of this customer M&A activity is difficult to estimate but may include:

- a near-term delay in capital expenditures by the impacted customers until transactions are completed. Once the transactions are completed, we believe there is the potential for increased capital expenditure as acquiring operators work to standardize the purchased network to the acquirer's existing systems and, in many cases, upgrade the acquired networks;
- pressures from the resulting customers for lower prices or better terms, reflecting the increase in the total volume of products purchased or the elimination of a price differential between the acquiring customer and the company acquired; and
- potential volatility in demand depending upon which technology, products and vendors each customer chooses to use post integration, including reductions in purchases from us in order to diversify their supplier base.

Capital Expenditures of Telecom Customers Have Been and May Continue to be Lower — The FCC recently completed a wireless spectrum auction which raised a record amount for the acquired wireless spectrum licenses. Many of our telecom customers, including AT&T and Verizon, participated in this auction in the interest of expanding their network capacity to meet increasing customer demand. As a result, capital expenditures at our existing and potential telecom customers are expected to be lower in the near term as a result of the costs associated with participating in the auction. Additional spectrum auctions, both in the U.S. (in 2016) and in some foreign markets are expected to occur which could further impact the capital expenditure strategies of telecom customers. The purchase of DirecTV by AT&T has altered the historic AT&T product strategy for video deployments decreasing our sales. Verizon has announced the sale of certain properties to Frontier, coupled with a decrease in net subscriber additions has impacted the demand for our products. Nevertheless, as described below, we still believe that the need for network expansion to meet customer demand presents potential opportunities for increased sales of our products to these customers.

Foreign Exchange Fluctuations Have and May Continue to Impact Demand — The majority of our international sales are denominated in U.S. dollars. As a result of the recent strengthening of the U.S. dollar, our international customers have and may continue to experience greater costs in converting their local currencies to US dollars to purchase our products. These customers may delay or reduce future purchases from us, and we may experience pricing pressures in order to maintain or increase our market share with these international customers, and we may face longer payment cycles.

Impacts of regulatory changes — The FCC has recently adopted new "net neutrality" regulations that, among other things, subject Internet service providers to common carriage regulation under Title II of the Communications Act. These regulations have been appealed in federal court. In February 2016, the FCC proposed new rules intended to impose new technology mandates on multichannel video programming distributors ("MVPDs") that would include many of our customers aimed at enabling retail video devices to access MVPD services without the need for an operator-supplied set-top box. If implemented, such mandates could result in our customers reducing their investment in their networks and in the development and deployment of new set-top boxes and/or increase the number of companies that we compete with.

Competition from Non-Cable and Telecom Service Providers — OTT TV continues to gain traction with consumers through providers like Netflix and Hulu. This is driving two key service provider trends: 1.) new demand for higher bandwidth, and 2.) increasing pressure to integrate OTT into traditional TV services. Both of these trends support ARRIS's business, which provides both the infrastructure and CPE to deliver new hybridized services over IP.

Growth of Connected Device Ecosystem — Consumers' growing appetite for connected devices creates an unprecedented opportunity to deliver consistent and engaging services over this Internet of Things. Service providers have an incumbent advantage in offering new forms of entertainment and communications, but still face many challenges in delivering new services across this complex system of devices. ARRIS is in position to drive this opportunity for providers as a result of our expertise in full-cycle service delivery — from the network to the cloud and the home. We provide the portfolio and professional services to navigate this new combination of device interfaces, communications protocols, device management standards, and security considerations.

Content Navigation and Personalization — As the library of available media continues to grow, consumers are having a harder time finding what they're looking for, and service providers are facing new pressure to simplify the experience. ARRIS is collaborating with the world's leading providers to solve these challenges through a combination of technology for content navigation and personalization. This technology can tailor content selection, search, and recommendations to consumers' preferences, saving them time in deciding what to watch, and then personalizing that experience by delivering it whenever they want and on their device of choice. By making content navigation more proactive and personalized, ARRIS believes that providers can anticipate consumers' needs and enable them to spend more time watching and less time scrolling through content.

Network Optimization and Scaling Infrastructure to Keep Up with Increasing Consumer Bandwidth Demand — As service providers prepare to deliver more advanced services to subscribers — such as 4K TV, IoT, gigabit Wi-Fi — they're investing increasingly in their networks to anticipate the reciprocal need for more bandwidth. Providers are looking to ARRIS for its leadership in technologies like DOCSIS, CCAP, and Remote PHY to scale to these multi-gigabit services and ARRIS continues to invest in R&D to keep its customers' networks ahead of market demand for these services.

Competition Increasing between Cable Operators, Telecom Companies, and New Entrants — The lines between telecom and cable providers has blurred as each has embraced the triple play. Moreover, new market participants, like Google, have entered the market with competing products, such as fiber-to-the-home services. This competition emphasizes the enabling technologies behind each approach — including DOCSIS, fiber, G.Fast, and others — and the increasing investment in the network infrastructure and CPE required to deliver these services. ARRIS's leadership across these solutions positions us to capitalize on the growing competition between all three stakeholders.

Service Providers are Demanding Advanced Network Technologies and Software Solutions. The increase in volume and complexity of the signals transmitted over broadband networks as a result of the migration to an all-digital, all-IP, on demand network is causing service providers to deploy new technologies. Service providers also are demanding sophisticated network and service management software applications that minimize operating expenditures needed to support the complexity of two-way broadband communications systems. As a result, service providers are focusing on technologies and products that are flexible, cost-effective, compliant with open industry standards, and scalable to meet subscriber growth and effectively deliver reliable, enhanced services. As part of this evolution, some operators (for example Comcast with its Reference Design Kit ("RDK") efforts) are choosing to design portions of the set-tops firmware internally. As a result we anticipate that over time operators will migrate to an all IP network and look to enable new platforms and technologies intended to accelerate the deployment of new services. As this occurs, which we believe will be over a multi-year period, we anticipate a decline in demand for our traditional set-tops and an increase in demand in new IP set-tops.

Consolidation of Vendors Has Occurred and May Continue — Our industry has seen, and is expected to continue to see, significant consolidation. The specific impact of the above trend is difficult to predict and quantify, but in general we believe:

- Vendor consolidation gives competitors greater scale for R&D, sales and marketing, and manufacturing, all of which potentially allow them to more effectively meet customer expectations and lower their product costs.
- At the same time, vendor consolidation may make customers uncomfortable with the share of spend going to the new, larger entity which may create opportunities for ARRIS to become an alternate supplier.

Results of Operations

Overview

As highlighted above, we have faced, and in the future will face, significant changes in our industry and business. These changes have impacted our results of operations and are expected to do so in the future. As a result, we have implemented strategies both in anticipation and in reaction to the impact of these dynamics.

Below is a table that shows our key operating data as a percentage of sales. Following the table is a detailed description of the major factors impacting the year-over-year changes of the key lines of our results of operations.

	Years Ended December 31,		
	2015	2014	2013
Net sales	100.0%	100.0%	100.0%
Cost of sales	70.4	70.3	71.8
Gross margin	29.6	29.7	28.2
Operating expenses:			
Selling, general, and administrative expenses	8.7	7.7	9.3
Research and development expenses	11.1	10.5	11.8
Amortization of intangible assets	4.8	4.4	5.3
Integration, acquisition, restructuring and other costs	0.6	0.7	2.3
Operating income (loss)	4.4	6.4	(0.5)
Other expense (income):			
Interest expense	1.5	1.2	1.9
Loss on investments	0.1	0.2	0.1
Loss (gain) on foreign currency	0.5	0.1	(0.1)
Interest income	(0.1)	(0.1)	(0.1)
Other expense, net	0.2	0.5	0.4
Income (loss) before income taxes	2.2	4.5	(2.7)
Income tax expense (benefit)	0.5	(1.6)	(1.3)
Consolidated net income (loss)	1.7%	6.1%	(1.4)%
Net loss attributable to noncontrolling interest	(0.2)	—	—
Net income (loss) attributable to ARRIS Group, Inc.	1.9%	6.1%	(1.4)%

Comparison of Operations for the Three Years Ended December 31, 2015

Net Sales

The table below sets forth our net sales for the three years ended December 31, 2015, 2014 and 2013 for each of our business segments described in Item 1 of this Form 10-K (in thousands, except percentages):

	Net Sales			Increase (Decrease) Between Periods			
	For the Years Ended December 31,			2015 vs. 2014		2014 vs. 2013	
	2015	2014	2013	$	%	$	%
Business Segment:							
CPE	$ 3,136,585	$ 3,690,454	$ 2,448,381	$ (553,869)	(15.0)%	$ 1,242,073	50.7%
N&C	1,661,594	1,637,544	1,193,001	24,050	1.5%	444,543	37.3%
Other	153	(5,077)	(20,480)	5,230	103.0%	15,403	75.2%
Total sales	$ 4,798,332	$ 5,322,921	$ 3,620,902	$ (524,589)	(9.9)%	$ 1,702,019	47.0%

The table below sets forth our domestic and international sales for the three years ended December 31, 2015, 2014 and 2013 (in thousands, except percentages):

	Net Sales			Increase (Decrease) Between Periods			
	For the Years Ended December 31,			2015 vs. 2014		2014 vs. 2013	
	2015	2014	2013	$	%	$	%
Domestic	$3,418,583	$3,957,203	$2,457,172	$ (538,620)	(13.6)%	$ 1,500,031	61.0%
International:							
Americas, excluding U.S	880,581	900,822	746,146	(20,241)	(2.2)%	154,676	20.7%
Asia Pacific	142,893	147,921	153,674	(5,028)	(3.4)%	(5,753)	(3.7)%
EMEA	356,275	316,975	263,910	39,300	12.4%	53,065	20.1%
Total international	1,379,749	1,365,718	1,163,730	14,031	1.0%	201,988	17.4%
Total sales	$4,798,332	$5,322,921	$3,620,902	$ (524,589)	(9.9)%	$ 1,702,019	47.0%

Customer Premises Equipment Net Sales 2015 vs. 2014

During the year ended December 31, 2015, sales of our CPE segment decreased by approximately $553.9 million, or 15.0%, as compared to 2014. CPE sales declined primarily as a result of lower video CPE product sales compared to the prior year. The decline was driven by sales of new product introductions and platform transitions implemented by certain customers during 2014 which did not recur, as well as telco customer subscriber growth challenges in 2015 as several of these customers look to reevaluate or change their video strategy. This was partially offset by growth in sales of broadband CPE products.

Network & Cloud Net Sales 2015 vs. 2014

During the year ended December 31, 2015, sales in the N&C segment increased by approximately $24.1 million, or 1.5%, as compared to 2014. Net sales of professional services increased $40.3 million compared to the prior year. The increase year over year was a result of the growing pipeline of professional services projects during 2015. Net sales of Cloud increased $11.7 million compared to 2014, primarily due to the addition of ActiveVideo in 2015. Net sales of infrastructure equipment decreased $27.9 million compared to the prior year. The decrease reflects higher shipments in the second half of 2014 resulting from the launch of the E6000 CCAP platform, offset by increases in distribution and transmission equipment sales.

Customer Premises Equipment Net Sales 2014 vs. 2013

During the year ended December 31, 2014, sales of our CPE segment increased by approximately $1,242.1 million, or 50.7%, as compared to 2013. The increase was attributable to the inclusion of sales associated with our acquisition of Motorola Home as well as the introduction of new products, in particular the XG1 and Verizon Media Server (VMS) video gateways. The sales increase was also driven by strong cable and telco set-tops and broadband device demand.

Network & Cloud Net Sales 2014 vs. 2013

During the year ended December 31, 2014, sales in the N&C segment increased by approximately $444.5 million, or 37.3%, as compared to 2013. The increase in sales was primarily the result of the inclusion of sales associated with our acquisition of Motorola Home as well as strong sales across most product lines, led by our new CMTS platform, the E6000 CCAP and video solutions.

Gross Margin

The table below sets forth our gross margin for the three years ended December 31, 2015, 2014 and 2013 (in thousands, except percentages):

	Gross Margin For the Years Ended December 31,			Increase (Decrease) Between Periods 2015 vs. 2014		2014 vs. 2013	
	2015	2014	2013	$	%	$	%
Gross margin dollars	$1,418,923	$1,582,496	$1,022,748	(163,573)	(10.3)%	559,748	54.7%
Gross margin	29.6%	29.7%	28.2%		(0.1)		1.5

During the year ended December 31, 2015, gross margin dollars decreased as compared to the same period in 2014 primarily as a result of lower sales.

During the year ended December 31, 2014, gross margin dollars and gross margin percentage increased as compared to 2013. The increase in gross margin dollars was primarily the result of the inclusion of sales associated with our acquisition of Motorola Home. In addition, the gross margin for the year ended December 31, 2013 included a $53.8 million impact associated with writing up the historic cost of the Motorola Home inventory to fair value at the date of acquisition (subsequently increasing cost of goods sold) as well as $16.5 million of costs associated with the rationalization of certain products after the acquisition date.

Operating Expenses

The table below provides detail regarding our operating expenses (in thousands, except percentages):

	Operating Expenses For the Years Ended December 31,			Increase (Decrease) Between Periods 2015 vs. 2014		2014 vs. 2013	
	2015	2014	2013	$	%	$	%
Selling, general & administrative	$ 417,085	$ 410,568	$ 338,252	$ 6,517	1.6%	$ 72,316	21.4%
Research & development	534,168	556,575	425,825	(22,407)	(4.0)%	130,750	30.7%
Amortization of intangible assets	227,440	236,521	193,637	(9,081)	(3.8)%	42,884	21.1%
Integration, acquisition, restructuring & other	29,277	37,498	83,047	(8,221)	(21.9)%	(45,549)	(54.8)%
Total	$1,207,970	$1,241,162	$1,040,761	$(33,192)	(2.7)%	$200,401	19.3%

Selling, General, and Administrative, or SG&A, Expenses

Our selling, general and administrative expenses include sales and marketing costs, including personnel expenses for sales and marketing staff expenses, advertising, trade shows, corporate communications, product marketing expenses and other marketing expenses. In addition, general and administrative expenses consist of personnel expenses and other general corporate expenses for corporate executives, finance and accounting, human resources, facilities, information technology, legal and professional fees.

2015 vs. 2014

SG&A expenses increased for the year ended December 31, 2015 compared to the prior year. The increase was primarily due to $8.5 million of incremental expense associated with the ActiveVideo acquisition, $6.2 million increase in sales and marketing expenses and $8.3 million increase in general and administrative expenses, offset by lower variable and other compensation expense of approximately $16.5 million.

2014 vs. 2013

The year-over-year increase in SG&A expenses primarily reflect the inclusion of expenses associated with the Motorola Home acquisition, as well as higher variable compensation costs and bad debt expense. The increase was partially offset as a result of certain information technology and other costs, formerly allocated to SG&A, which have been reclassified effective January 1, 2014 to cost of sales and research and development as a result of the way we review the business.

Research & Development, or R&D, Expenses

Research and development expenses consist primarily of personnel expenses, payments to suppliers for design services, product certification expenditures to qualify our products for sale into specific markets, prototypes, other consulting fees and reasonable allocations of our information technology and corporate facility costs. Research and development expenses are recognized as they are incurred.

2015 vs. 2014

The decrease year-over-year in R&D expense reflects lower variable and other compensation expense of approximately $17.2 million, $5.3 million reduction in consulting fees, project related expenses and IT expenses, lower depreciation expense of $7.9 million which were partially offset by $7.0 million of incremental expense associated with the ActiveVideo acquisition.

2014 vs. 2013

The increase year-over-year in R&D expense reflects the inclusion of expenses associated with the Motorola Home acquisition, as well as higher variable compensation costs and allocations of information technology and other costs.

Amortization of Intangible Assets

Our intangible amortization expense relates to finite-lived intangible assets primarily acquired in business combinations. Intangibles amortization expense was $227.4 million in 2015, as compared with $236.5 and $193.6 million in 2014 and 2013, respectively.

As a result of the Pace acquisition in 2016, we anticipate higher amortization of intangibles expense in future periods.

Integration, Acquisition, Restructuring and Other Costs

During 2015, we recorded acquisition related expenses and integration expenses of $28.2 million. The expenses in 2015 were primarily related to the acquisition of Pace completed in 2016 and the ActiveVideo acquisition, and are expected to increase in 2016 as we work to integrate the Pace acquisition.

During 2014, we recorded acquisition related expenses and integration expenses of $34.1 million. These expenses primarily related to the acquisition of Motorola Home and consisted of integration related outside services and legal fees. The Company has substantially completed its integration of the Motorola Home business in 2014.

During 2013, we recorded acquisition related expenses and integration expenses of $18.6 million and $26.9 million, respectively. These expenses related to the acquisition of Motorola Home and consisted of transaction costs, integration related outside services and legal fees.

During 2015, 2014 and 2013, we recorded restructuring charges of $1.0 million, $3.4 million and $37.6 million, respectively. The charges in 2015 were related to severance and employee termination benefits. The charge recorded in 2014 related to rationalization of facilities resulting in costs related to severance and employee termination benefits and the charges in 2013 were related to severance, employee termination benefits and facilities. We anticipate that we will incur additional restructuring costs in 2016 as a result of the recent acquisition of Pace.

Direct Contribution

The table below sets forth our direct contribution, which is defined as gross margin less direct operating expenses, for the three years ended December 31, 2015, 2014 and 2013 (in thousands, except percentages):

	Direct Contribution			Increase (Decrease) Between Periods			
	For the Years Ended December 31,			2015 vs. 2014		2014 vs. 2013	
	2015	2014	2013	$	%	$	%
Segment:							
CPE	$ 548,840	$ 791,244	$509,473	$(242,404)	(30.6)%	$281,771	55.3%
N&C	487,166	430,943	264,589	56,223	13.0%	166,354	62.9%
Total	$1,036,006	$1,222,187	$774,062	$(186,181)	(15.2)%	$448,125	57.9%

Customer Premises Equipment Direct Contribution 2015 vs. 2014

During 2015, direct contribution in our CPE segment decreased by approximately 30.6% as compared to the same period in 2014. The decrease was primarily attributable to lower sales as noted above.

Network & Cloud Direct Contribution 2015 vs. 2014

During 2015, direct contribution in our N&C segment increased by approximately 13.0% as compared to the same period in 2014. The increase was primarily attributable to sales of higher margin infrastructure products.

Customer Premises Equipment Direct Contribution 2014 vs. 2013

During 2014, direct contribution in our CPE segment increased by approximately 55.3% as compared to the same period in 2013. The increase was primarily attributable to the inclusion of direct contribution associated with our acquisition of Motorola Home. Further, the direct contribution is favorably impacted by mix, given, that in the aggregate the contribution margin of former Motorola Home products are greater than that of former ARRIS products.

Network & Cloud Direct Contribution 2014 vs. 2013

During 2014, direct contribution in our N&C segment increased by approximately 62.9% as compared to the same period in 2013. The increase was primarily attributable to the inclusion of direct contribution associated with our acquisition of Motorola Home and the success of our E6000 CMTS platform.

Corporate and Unallocated Costs

There are expenses that are not included in the measure of segment direct contribution and as such are reported as "Corporate and Unallocated Costs" and are included in the reconciliation to income (loss) before income taxes. The "Corporate and Unallocated Costs" category of expenses include corporate sales and marketing, home office general and administrative expenses, annual bonus and equity compensation.

For the three years ended December 31, 2015, 2014 and 2013, the composition of our corporate and unallocated costs that are reflected in the consolidated statement of operations were as follows (in thousands, except percentages):

	Direct Contribution			Increase (Decrease) Between Periods			
	For the Years Ended December 31,			2015 vs. 2014		2014 vs. 2013	
	2015	2014	2013	$	%	$	%
Cost of sales	$ 56,311	$ 69,973	$122,460	$(13,662)	(19.5)%	$(52,487)	(42.9)%
Selling, general & administrative expense	349,993	349,693	278,921	300	0.1%	70,772	25.4%
Research & development expenses	162,032	187,168	114,010	(25,136)	(13.4)%	73,158	64.2%
Total	$568,336	$606,834	$515,391	$(38,498)	(6.3)%	$ 91,443	17.7%

During 2015, corporate and unallocated costs decreased compared to in 2014. The decrease was primarily due to lower variable compensation costs.

During 2014, corporate and unallocated costs increased compared to 2013. The increase was primarily due to the inclusion of expenses associated with our acquisition of Motorola Home.

Other Expense

The table below provides detail regarding our other expense (in thousands):

	Other Expense (Income)			Increase (Decrease) Between Periods			
	For the Years Ended December 31,			2015 vs. 2014		2014 vs. 2013	
	2015	2014	2013	$	%	$	%
Interest expense	$ 70,936	$ 62,901	$67,888	$ 8,035	12.8%	$ (4,987)	(7.3)%
Loss on investments	6,220	10,961	2,698	(4,741)	(43.3)%	8,263	306.3%
Loss (gain) on foreign currency	20,761	2,637	(3,502)	18,124	687.3%	6,139	175.3%
Interest income	(2,379)	(2,590)	(2,936)	211	8.1%	346	11.8%
Other expense	8,362	28,195	13,989	(19,833)	(70.3)%	14,206	101.6%
Total other expense	$103,900	$102,104	$78,137	$ 1,796	1.8%	$23,967	30.7%

Interest Expense

Interest expense reflects the amortization of debt issuance costs (deferred finance fees and debt discounts) related to our term loans, the non-cash interest component of our convertible subordinated notes which were fully redeemed during the fourth quarter of 2013, and interest expense paid on the notes, term loans and other debt obligations.

Interest expense was $70.9 million in 2015, as compared with $62.9 million and $67.9 million in 2014 and 2013, respectively.

During 2015, in connection with amending our credit agreement, as described in more detail below, we expensed approximately $13.0 million of debt issuance costs and wrote off approximately $2.1 million of existing debt issuance costs associated with certain lenders who were not party to the amended Term Loan A Facility and Revolving Credit Facility, which were included as interest expense in the Consolidated Statements of Operations for the year ended December 31, 2015. Upon the closing of the Pace acquisition in 2016, we incurred an additional $2.3 million of debt issuance costs which will be capitalized and amortized over the term of the loan.

During 2014, optional debt pre-payments were made resulting in the accelerated write-off of deferred financing fees and debt discount of $2.7 million.

Loss on Investments

From time to time, we hold certain investments in the common stock of private and publicly-traded companies, a number of non-marketable equity securities, and investments in rabbi trusts associated with our deferred compensation plans. In addition, we have certain investments in limited liability companies and partnerships that are accounted for using the equity method of accounting. As such our equity portion in current earnings of such companies is included in the loss (gain) on investments.

During the years ended December 31, 2015, 2014 and 2013, we recorded net losses on investment related to these investments of $6.2 million, $11.0 million and $2.7 million, respectively, including impairment charges.

The Company performed an evaluation of its investments and concluded that indicators of impairment existed for certain investments, and that their fair value had declined. This resulted in other-than-temporary impairment charge of $7.0 million during the year ended December 31, 2014. No impairment charges were recorded in 2015 and 2013.

Loss (Gain) on Foreign Currency

During the years ended December 31, 2015, 2014 and 2013, we recorded net losses (gains) on foreign currency of $20.8 million, $2.6 million and $(3.5) million, respectively. We have US dollar functional currency entities that bill certain international customers in their local currency and foreign functional currency entities that procure in U.S. dollars. We also have certain predictable expenditures for international operations in local currency. Additionally, certain intercompany transactions are denominated in foreign currencies and subject to re-measurement. To mitigate the volatility related to fluctuations in the foreign exchange rates, we have entered into various foreign currency contracts. The gain or loss on foreign currency is driven by the fluctuations in the foreign currency exchange rates.

As part of the Pace acquisition completed in 2016, we paid the former Pace shareholders 132.5 pence per share in cash consideration, which was approximately 434.3 million British pounds, in the aggregate, as of January 4, 2016. We have entered into foreign currency forward contracts to purchase British pounds and sell U.S. Dollars in order to mitigate the volatility related to fluctuations in the foreign exchange rate prior to the closing period. As of December 31, 2015, we had forward contracts with notional amounts totaling 385 million British pounds which mature on March 31, 2016. The contracts fixed the British pound to U.S. dollar forward exchange rate at various rates. During the year ended December 31, 2015, losses of $22.3 million were recorded related to the British pound forward contracts. These contracts were terminated upon the close of the Pace acquisition in January 2016.

Interest Income

Interest income reflects interest earned on cash, cash equivalents, and short-term and long-term marketable security investments. During the years ended December 31, 2015, 2014 and 2013, we recorded interest income of $2.4 million, $2.6 million and $2.9 million, respectively.

Other Expense

Other expense for the years ended December 31, 2015, 2014 and 2013 were $8.4 million, $28.2 million and $14.0 million, respectively.

In connection with our acquisition of Motorola Home, we obtained certain foreign tax credit benefits for which we were obligated to pay Google if and when utilized and for which we recorded a liability. During 2015, we recorded income of $3.7 million, as a result of a reduction of foreign tax credit attributes reducing the liability to Google previously recorded in 2014 from $20.5 million to $16.8 million. For the year ended December 31, 2015, we recorded a loss of $5.3 million from the sale of land and building associated with our San Diego campus facilities.

For the year ended December 31, 2014, we recorded a $2.1 million write-down in the carrying amount of land and building reclassified as held for sale as a result of obtaining a letter of intent for its sale and is included in other expense, net. In connection with Comcast's agreement in January 2013 to invest in ARRIS upon the acquisition of Motorola Home, the agreed-upon purchase price was less than the market price on the date of agreement, requiring the forward arrangement be marked to market for the difference in fair value. As a result, we recorded a mark-to-market adjustment of $13.2 million in 2013 which was recorded as Other Expense.

Income Tax Expense (Benefit)

Our annual provision for income taxes and determination of the deferred tax assets and liabilities require management to assess uncertainties, make judgments regarding outcomes, and utilize estimates. To the extent the final outcome differs from initial assessments and estimates, future adjustments to our tax assets and liabilities will be necessary.

In 2015, we recorded $22.6 million of income tax expense for U.S. federal and state taxes and foreign taxes, which was 21.1% of our pre-tax income of $107.1 million. The Company's effective income tax rate for 2015 was favorably impacted by $2.4 million for the following items. The tax benefit was due to the release of $27.3 million of valuation allowances primarily recorded for U.S. federal net operating losses arising from the acquisition of the Motorola Home business from Google. This benefit was offset unfavorably by $19.0 million for a gain recognized on the Taiwan entity, $4.9 million for increases in Subpart F income and $1.1 million for the recapture of losses upon conversion of ARRIS International Limited to a private limited company. Other favorable items were recorded for U.S Federal, U.S. State and non-U.S. return to provision items of $1.3 million and adjustments to uncertain tax positions of $8.6 million. Other items with an unfavorable impact on the tax rate include adjustments to foreign tax credits received from Google of $3.7 million, the effect of accelerating the vesting of equity compensation of $4.1 million and $2.2 million for the conversion of ActiveVideo to a partnership. In addition, $20.4 million of current tax benefit was recorded when the President signed legislation to approve the extension of the U.S. federal research and development tax credit permanently. Exclusive of these items, the effective income tax rate would have been approximately 22.6%.

In 2014, we recorded ($88.0) million of income tax benefit for U.S. federal and state taxes and foreign taxes, which was (36.8)% of our pre-tax income of $239.2 million. The Company's effective income tax rate for 2014 was favorably impacted by $176.5 million for the following items. The tax benefit was primarily due to the release of valuation allowances recorded for U.S. federal net operating losses, U.S. federal tax credits and from deferred tax assets recorded for state net operating losses and state research and development tax credits arising from the acquisition of the Motorola Home business from Google. In addition, $18.1 million of current tax benefit was recorded when the President signed legislation to approve the extension of the U.S. federal research and development tax credit through December 31, 2014. To assess the Company's ability to remove the valuation allowances recorded against certain deferred tax assets acquired in the Motorola Home acquisition, the Company was required to analyze the impact of the various tax rules which limit a Company's ability to utilize net operating losses and tax credits. The Company was also required to assess tax planning strategies to best allow for the utilization of the tax attributes. During the fourth quarter of 2014, the Company completed the required tax analysis and received the final information from Google as to the amounts and types of acquired deferred tax assets. Exclusive of these items, the effective income tax rate would have been approximately 29.6%.

In 2013, we recorded $47.4 million of income tax benefit for U.S. federal and state taxes and foreign taxes, which was 49.3% of our pre-tax loss of $96.2 million. The effective income tax rate was favorably impacted by $15.4 million for the following items. The most significant 2013 items were the reversal of $6.7 million of tax liabilities from uncertain tax positions, mostly attributable to the expiration of certain statutes of limitations in the third and fourth quarters of 2013, and a favorable impact of $8.7 million from global provision-to-return adjustments, including the 2012 U.S. federal credit for research and development, which was not reenacted until first quarter of 2013. Additionally, the Company recorded a pre-tax book loss on an investment in ARRIS by Comcast of approximately $26.4 million and a pre-tax book loss of approximately $10.0 million on certain foreign entities from the Motorola Home acquisition, on which no tax benefit was recorded. Exclusive of these items, the effective income tax rate would have been approximately (17.9)%.

Non-GAAP Measures

As part of our ongoing review of financial information related to our business, we regularly use non-GAAP measures, in particular non-GAAP earnings, as we believe they provide a meaningful insight into our business and trends. We also believe that these non-GAAP measures provide readers of our financial statements with useful information and insight with respect to the results of our business. However, the presentation of non-GAAP information is not intended to be considered in isolation or as a substitute for results prepared in accordance with GAAP. Below are tables for the 2015, 2014 and 2013 which detail and reconcile GAAP and non-GAAP net sales and adjusted net income:

	Year 2015		Year 2014		Year 2013	
	Amount	Per Diluted Share	Amount	Per Diluted Share	Amount	Per Diluted Share
Net Sales	$4,798,332		$5,322,921		$3,620,902	
Highlighted items:						
Acquisition accounting impacts of deferred revenue	—		5,091		7,121	
Reduction in revenue related to Comcast investment in ARRIS	—		—		13,182	
Net Sales excluding highlighted items	$4,798,332		$5,328,012		$3,641,205	

	Year 2015		Year 2014		Year 2013	
	Amount	Per Diluted Share	Amount	Per Diluted Share	Amount	Per Diluted Share
Net income attributable to ARRIS Group, Inc	$ 92,181	$ 0.62	$ 327,211	$ 2.21	$ (48,760)	$ (0.37)(1)
Highlighted items:						
Impacting gross margin:						
Stock compensation expense	8,508	0.06	6,716	0.04	4,269	0.03
Acquisition accounting impacts of deferred revenue	—	—	3,448	0.02	5,545	0.04
Reduction in revenue related to Comcast investment in ARRIS Group, Inc	—	—	—	—	13,182	0.10
Acquisition accounting impacts related to inventory	—	—	—	—	53,782	0.40
Product rationalization	—	—	—	—	16,473	0.12
Impacting operating expenses:						
Integration, acquisition, restructuring and other costs	29,277	0.20	37,498	0.25	83,047	0.61
Amortization of intangible assets	227,440	1.52	236,521	1.60	193,637	1.44
Stock compensation expense	55,710	0.37	47,084	0.32	31,520	0.23
Noncontrolling interest share of non-GAAP adjustments	(2,947)	(0.02)	—	—	—	—
Impacting other (income) / expense:						
Non-cash interest expense	—	—	—	—	9,926	0.08
Mark to market FV adjustment related to Comcast investment in ARRIS Group, Inc	—	—	—	—	13,189	0.10
Impairment on Investments	(9)	(0.00)	7,050	0.05	—	—
Debt amendment fees	15,342	0.10	—	—	—	—
Credit facility — ticking fees	1,700	0.01	—	—	865	0.01
Asset impairment	—	—	2,132	0.01	—	—
Foreign exchange contract losses related to cash consideration of Pace acquisition	22,283	0.15	—	—	—	—
Liability/adjustment related to foreign tax credit benefits	(3,669)	(0.02)	20,492	0.14	—	—
Loss on sale of building	5,142	0.03	—	—	—	—
Impacting income tax expense:						
Net tax items	(128,864)	(0.86)	(279,135)	(1.88)	(152,883)	(1.13)
Total highlighted items	229,913	1.54	81,806	0.55	272,552	2.03
Net income excluding highlighted items	$ 322,094	$ 2.16	$ 409,017	$ 2.76	$ 223,792	$ 1.66
Weighted average common shares — basic		146,388		144,386		131,980
Weighted average common shares — diluted		149,359		148,280		135,136

(1) Basic shares used as losses were reported for the period and the inclusion of dilutive shares would be anti-dilutive.

In managing and reviewing our business performance, we exclude a number of items generally required to be reported under GAAP. Management believes that excluding these items is useful in understanding the trends and managing our operations. We provide these supplemental non-GAAP measures in order to assist the investment community to see ARRIS through the "eyes of management," and therefore enhance understanding of ARRIS's operating performance. Non-GAAP financial measures should be viewed in addition to, and not as an alternative to, the Company's reported results prepared in accordance with GAAP. Our non-GAAP financial measures reflect adjustments based on the following items, as well as the related income tax effects:

Stock-Based Compensation Expense: We have excluded the effect of stock-based compensation expenses in calculating our non-GAAP operating expenses and net income (loss) measures. Although stock-based compensation is a key incentive offered to our employees, we continue to evaluate our business performance excluding stock-based compensation expenses. We record non-cash compensation expense related to grants of restricted stock units. Depending upon the size, timing and the terms of the grants, the non-cash compensation expense may vary significantly but will recur in future periods.

Acquisition Accounting Impacts Related to Deferred Revenue: In connection with the accounting related to our acquisitions, business combination rules require us to account for the fair values of deferred revenue arrangements for which acceptance has not been obtained, and post contract support in our purchase accounting. The non-GAAP adjustment to our sales and cost of sales is intended to include the full amounts of such revenues as if these purchase accounting adjustments had not been applied. We believe the adjustment to these revenues is useful as a measure of the ongoing performance of our business. We historically have experienced high renewal rates related to our support agreements, and our objective is to increase the renewal rates on acquired post contract support agreements. However, we cannot be certain that our customers will renew their contracts.

Reduction in Revenue Related to Comcast Investment in ARRIS: In connection with our acquisition of Motorola Home, Comcast was given an opportunity to invest in ARRIS. The accounting guidance required that we record the implied fair value of benefit received by Comcast from that investment as a reduction in revenue. Until the closing of the deal, changes in the value of the investment were marked to market and flowed through other expense (income). We have excluded the effect of the implied fair value in calculating our non-GAAP financial measures. We believe it is useful to understand the effects of these items on our total revenues and other expense (income).

Acquisition Accounting Impacts Related to Inventory Valuation: In connection with our acquisition of Motorola Home, business combinations rules required the inventory be recorded at fair value on the opening balance sheet. This is different from historical cost. Essentially we were required to write the inventory up to end customer price less a reasonable margin as a distributor. This resulted in an increase in the value of inventory and resulted in higher cost of goods sold as it was sold.

Product Rationalization: In conjunction with the integration of Motorola Home, we identified certain product lines that overlap. In the second quarter of 2013, we decided to eliminate certain products. As a result, we recorded expenses related to the elimination of inventory and certain vendor liabilities. We believe it is useful to understand the effects of this item on our total cost of goods sold.

Integration, Acquisition, Restructuring and Other Costs: We have excluded the effect of acquisition, integration, and other expenses and the effect of restructuring expenses in calculating our non-GAAP operating expenses and net income measures. We incurred expenses in connection with the acquisition of ActiveVideo, the Motorola Home acquisition, and the Pace acquisition, which we generally would not otherwise incur in the periods presented as part of our continuing operations. Acquisition and integration expenses consist of transaction costs, costs for transitional employees, other acquired employee related costs, and integration related outside services. Restructuring expenses consist of employee severance, abandoned facilities, product line disposition and other exit costs. We believe it is useful to understand the effects of these items on our total operating expenses.

Amortization of Intangible Assets: We have excluded the effect of amortization of intangible assets in calculating our non-GAAP operating expenses and net income (loss) measures. Amortization of intangible assets is non-cash, and is inconsistent in amount and frequency and is significantly affected by the timing and size of our acquisitions. Investors should note that the use of intangible assets contributed to our revenues earned during the periods presented and will contribute to our future period revenues as well. Amortization of intangible assets will recur in future periods.

Noncontrolling Interest share of Non-GAAP Adjustments: The joint venture formed with Charter for the ActiveVideo acquisition is accounted for by ARRIS under the consolidation method. As a result, the consolidated statements of operations include the revenues, expenses, and gains and losses of the noncontrolling interest. The amount of net income (loss) related to the noncontrolling interest are reported and presented separately in the consolidated statement of operations. We have excluded the noncontrolling share of any non GAAP adjusted measures recorded by the venture, as we believe it is useful to understand the effect of excluding this item when evaluating our ongoing performance.

Non-Cash Interest on Convertible Debt: We have excluded the effect of non-cash interest in calculating our non-GAAP operating expenses and net income (loss) measures. We record the accretion of the debt discount related to the equity component non-cash interest expense. We believe it is useful to understand the component of interest expense that will not be paid out in cash.

Mark To Market Fair Value Adjustment Related To Comcast Investment in ARRIS: In connection with our acquisition of Motorola Home, Comcast was given an opportunity to invest in ARRIS. The accounting guidance required us to mark to market the changes in the value of the investment and reflected that amount in other expense (income). We have excluded the effect of the implied fair value in calculating our non-GAAP financial measures. We believe it is useful to understand the effects of these items on our total other expense (income).

Impairment of Investment: We have excluded the effect of other-than-temporary impairments of a cost method investment in calculating our non-GAAP financial measures. We believe it is useful to understand the effect of this non-cash item in our other expense (income).

Debt Amendment Fees: In the second quarter of 2015, the Company amended its credit agreement. See “Financial Liquidity and Capital Resources”. Certain fees related to the debt modification have already been paid, and other fees related to the new Term Loan A-1 facility will be paid upon funding. We believe it is useful to understand the effect of this on our other expense (income).

Credit Facility — Ticking Fees: In connection with the acquisition of Pace and Motorola Home, the cash portion of the consideration was funded through debt financing commitments. A “ticking fee” is a fee paid to our banks to compensate for the time lag between the commitment allocation on a loan and the actual funding. We have excluded the effect of the ticking fee in calculating our non-GAAP financial measures. We believe it is useful to understand the effect of this item in our other expense (income).

Asset Impairment: In the second quarter of 2014, we entered into a contract to facilitate the sale of a building at less than its carrying amount. The asset was reclassified as held for sale and was measured at fair value less cost to sell. We have recorded an impairment charge to reduce the assets carrying amount to its estimated fair value less costs to sell in the period the held for sale criteria were met. We have excluded the effect of the asset held for sale impairment in calculating our non-GAAP financial measures. We believe it is useful to understand the effect of this non-cash item in our other expense (income).

Foreign Exchange Contract (Gains) Losses Related to Cash Consideration of Pace Acquisition: In the second quarter of 2015, the Company announced its intent to acquire Pace in exchange for stock and cash. We subsequently entered into foreign exchange forward contracts in order to hedge the foreign currency risk associated with the cash consideration of the Pace acquisition. These foreign exchange forward contracts were not designated as hedges, and accordingly, all changes in the fair value of these instruments are recognized as a loss (gain) on foreign currency in the Consolidated Statements of Operations. We believe it is useful to understand the effect of this on our other expense (income).

Liability/Adjustment Related to Foreign Tax Credit Benefits: In connection with our acquisition of Motorola Home, we obtained certain foreign tax credit benefits for which we recorded a liability to Google that we pay if and when the benefits are utilized resulting from certain provisions in the acquisition agreement. The expense and subsequent adjustments related to this liability has been recorded as part of other expense (income).

We have excluded the effect of the expense in the calculation of our non-GAAP financial measures. We believe it is useful to understand the effects of this item on our total other expense (income).

Loss on Sale of Building: In the first quarter of 2015, the Company sold land and a building that qualified for sale-leaseback accounting and was classified as an operating lease. A loss has been recorded on the sale. We have excluded the effect of the loss on sale of property in calculating our non-GAAP financial measures. We believe it is useful to understand the effect of excluding this item when evaluating our ongoing performance.

Net Tax Items: We have excluded the tax effect of the non-GAAP items mentioned above. Additionally, we have excluded the effects of certain tax adjustments related to state valuation allowances, research and development tax credits and provision to return differences.

Financial Liquidity and Capital Resources

Overview

One of our key strategies remains maintaining and improving our capital structure. The key metrics we focus on are summarized in the table below:

Liquidity & Capital Resources Data

	Year Ended December 31,		
	2015	2014	2013
	(in thousands, except DSO and Turns)		
Key Working Capital Items			
Cash provided by operating activities	$ 343,872	$ 459,281	$ 562,716
Cash, cash equivalents, and short-term investments	$ 879,052	$ 692,538	$ 509,798
Long-term U.S corporate bonds	$ —	$ 4,867	$ 3,577
Accounts Receivable, net	$ 651,893	$ 598,603	$ 619,571
-Days Sales Outstanding	48	42	54
Inventory, net	$ 401,592	$ 401,165	$ 330,129
-Turns	8.4	10.2	10.1
Key Financing Items			
Term loans at face value	$ 1,509,063	$ 1,547,563	$ 1,752,563
Cash used for redemption of convertible notes	$ —	$ —	$ 232,050
Cash used for debt repayment	$ 53,500	$ 209,653	$ 172,437
Lease financing obligation	$ 58,729	$ —	$ —
Cash used for share repurchases	$ 24,999	$ —	$ —
Key Investing Items			
Capital Expenditures	$ 49,890	$ 56,588	$ 71,443

Overview

In managing our liquidity and capital structure, we remained and are focused on key goals, and we have and will continue in the future to implement actions to achieve them. They include:

- Liquidity — ensure that we have sufficient cash resources or other short term liquidity to manage day to day operations.
- Growth — implement a plan to ensure that we have adequate capital resources, or access thereto, to fund internal growth and execute acquisitions.
- Deleverage — reduce our debt obligations.
- Share repurchases — opportunistically repurchase our ordinary shares.

Accounts Receivable & Inventory

We use the number of times per year that inventory turns over (based upon sales for the most recent period, or turns) to evaluate inventory management, and days sales outstanding, or DSOs, to evaluate accounts receivable management.

Accounts receivable at the end of 2015 increased as compared to the end of 2014, primarily as a result of payment patterns of our customers and timing of shipments to customers. DSOs increased reflecting a larger international mix.

Inventory at the end of 2015 was similar to that of the end of 2014, however, inventory turns were lower in 2015 reflecting the timing of customer requirements and anticipated demand for certain products.

Accounts receivable at the end of 2014 decreased as compared to the end of 2013. DSOs decreased from 2014 to 2013, primarily the result of payment patterns of our customers and timing of shipments to customers.

Inventory increased in 2014 as compared to 2013, primarily as a result of higher CPE inventory levels to protect against potential supply chain disruptions with West Coast port of entry delays, as well as timing of customer requirements. In addition, the decision to in-source the manufacturing of certain product lines resulted in higher levels of component inventory previously held at contract manufacturers.

Redemption of 2.00% Convertible Senior Notes due 2026

In 2013, the Company redeemed its convertible notes, for $231.2 million in cash considerations and issued 3.1 million shares of stock to Note holders.

Term Debt Repayments

In 2015, we repaid $53.5 million of our term debt, of which $38.5 million was term debt under our senior secured credit facilities and $15.0 million was term debt assumed and settled in conjunction with the ActiveVideo acquisition in April 2015.

In 2014, we repaid $209.7 million of debt, of which $205.0 million related to our term debt, including a $150 million of optional prepayment and $4.7 million of debt assumed and settled in conjunction with the closing of the SeaWell acquisition in April 2014.

In 2013, we repaid $172.4 million of our term debt, including a $125 million optional repayment.

Lease Financing Obligation

In the first quarter of 2015, we sold our San Diego office complex consisting of land and buildings. We concurrently entered into a leaseback arrangement for two of the buildings (Building 1 and Building 2). Building 1 did not qualify for sale leaseback accounting due to continuing involvement that will exist for the 10-year lease term. Accordingly, the carrying amount of Building 1 will remain on the Company’s balance sheet and will be depreciated over the ten-year lease period with the proceeds reflected as a financing obligation.

Share Repurchases

During 2015, we repurchased 0.9 million shares of our stock for $25.0 million at an average stock price of $28.70.

ARRIS did not repurchase any shares under the previously adopted share repurchase plan in 2014 and 2013.

In early 2016, our Board of Directors approved a new $300 million share repurchase authorization replacing all prior programs. Unless terminated earlier by a Board resolution, this new plan will expire when ARRIS has used all authorized funds for repurchase.

Summary of Current Liquidity Position and Potential for Future Capital Raising

We believe our current liquidity position, where we had approximately $879.1 million of cash, cash equivalents, and short-term investments on hand as of December 31, 2015, together with approximately $497.9 million in availability under our new Revolving Credit Facility, and the prospects for continued generation of cash from operations, are adequate for our short- and medium-term business needs, including our expanded operations following the completion of the Pace acquisition. Our cash, cash-equivalents and short-term investments as of December 31, 2015 include approximately $181.2 million held by foreign subsidiaries whose earnings we expect to reinvest indefinitely outside of the United States. Approximately $5.4M of cash as of December 31, 2015 are held by our Israeli subsidiary whose earnings is not reinvested indefinitely. We do not expect to need the cash generated by those foreign subsidiaries to fund our domestic operations. However, in the unforeseen event that we repatriate cash from those foreign subsidiaries, in excess of what is owed to the United States parent, we may be required to provide for and pay U.S. taxes on permanently repatriated funds.

We have subsidiaries in countries that maintain restrictions, such as legal reserves, with respect to the amount of dividends that the subsidiaries can distribute. Additionally, some countries impose restrictions or controls over how and when dividends can be paid by these subsidiaries. While we do not currently intend to repatriate earnings from entities in these countries, if we were to be required to distribute earnings from such countries, the timing of the distribution and the funds available to distribute, would be adversely impacted by these restrictions.

We expect to be able to generate sufficient cash on a consolidated basis to make all of the principal and interest payments under our senior secured credit facilities. Should our available funds be insufficient to support these initiatives or our operations, it is possible that we will raise capital through private or public, share or debt offerings.

Senior Secured Credit Facilities

On June 18, 2015, we amended and restated our credit agreement dated March 27, 2013 (the “Existing Credit Agreement”) to improve the terms and conditions of the credit agreement, extend the maturities of certain loan facilities, increase the amount of the revolving credit facility, and add a new term A-1 loan facility to fund the acquisition of Pace. The credit facility under the amended credit agreement (the “Amended Credit Agreement”) is comprised of (i) a “Term Loan A Facility” of $990 million, (ii) a “Term Loan B Facility” of $543.8 million, (iii) a “Revolving Credit Facility” of $500 million and (iv) a “Term Loan A-1 Facility” of $800 million, which was funded upon the closing of the acquisition of Pace in 2016. The Amended Credit Agreement refinanced the Term Loan A Facility and Revolving Credit Facility under the Existing Credit Agreement while the Term Loan B Facility is a continuation of the Term Loan B Facility under the Existing Credit Agreement. Under the Amended Credit Agreement, the Term Loan A Facility and the Revolving Credit Facility will mature on June 18, 2020. The Term Loan B Facility will mature on April 17, 2020. We determined that the refinancing transaction was treated as a debt modification as the changes in the terms of the amended Term Loan A Facility and Revolving Credit Facility were not considered substantial. In connection with the Amended Credit Agreement, as of December 31, 2015, we capitalized approximately $5.0 million of financing fees and $3.2 million of original issuance discount. An additional $2.3 million of original issuance discount will be capitalized in the first quarter of 2016 related to drawing on the Term A-1 Facility. In addition, we expensed approximately $13.0 million of debt issuance costs and wrote off approximately $2.1 million of existing debt issuance costs associated with certain lenders who were not party to the amended Term Loan A Facility and Revolving Credit Facility, which were included as interest expense in the Consolidated Statements of Operations for the year ended December 31, 2015. Interest rates on borrowings under the senior secured credit facilities are set forth in the table below. As of December 31, 2015, we had $1,509.1 million face value outstanding under the Term Loan A and Term Loan B Facilities, no borrowings under the Revolving Credit Facility and letters of credit totaling $2.1 million issued under the Revolving Credit Facility.

	Rate	As of December 31, 2015
Term Loan A	LIBOR + 1.75 %	2.17%
Term Loan B	LIBOR (1) + 2.50 %	3.25%
Revolving Credit Facility (2)	LIBOR + 1.75 %	Not Applicable

(1) Includes LIBOR floor of 0.75%
(2) Includes unused commitment fee of 0.35% and letter of credit fee of 1.75% not reflected in interest rate above.

Borrowings under the senior secured credit facilities are secured by first priority liens on substantially all of the assets of ARRIS and certain of its present and future subsidiaries that are or become parties to, or guarantors under, the Amended Credit Agreement governing the senior secured credit facilities. The Amended Credit Agreement provides terms for mandatory prepayments and optional prepayments and commitment reductions. The Amended Credit Agreement also includes events of default, which are customary for facilities of this type (with customary grace periods, as applicable), including provisions under which, upon the occurrence of an event of default, all amounts outstanding under the credit facilities may be accelerated. The Amended Credit Agreement contains usual and customary limitations on indebtedness, liens, restricted payments, acquisitions and asset sales in the form of affirmative, negative and financial covenants, which are customary for financings of this type, including the maintenance of a minimum interest coverage ratio of 3.50:1 and a maximum leverage ratio of 3.75:1 (with a scheduled decrease to 3.50:1 in the first quarter of 2017). As of December 31, 2015, we were in compliance with all covenants under the Amended Credit Agreement.

The Amended Credit Agreement provides for certain adjustments to the interest rates paid on the Term Loan A, Term Loan A-1, Term Loan B and Revolving Credit Facility based upon certain leverage ratios.

Commitments

Following is a summary of our contractual obligations as of December 31, 2015 (in thousands):

	Payments due by period				
Contractual Obligations	**Less than 1 Year**	**1-3 Years**	**3-5 Years**	**More than 5 Years**	**Total**
Credit facilities (1)	$ 49,500	$ 99,000	$1,360,562	$ —	$1,509,062
Operating leases, net of sublease income (2)	33,259	44,458	26,822	44,232	148,771
Purchase obligations (3)	405,761	10,002	—	—	415,763
Total contractual obligations (4)	$ 488,520	$153,460	$1,387,384	$44,232	$2,073,596

(1) Represents face values of Term Loan A and B which have terms of five years and seven years respectively. The balance excludes Term Loan A-1 Facility of $800 million, which was funded upon the closing of the acquisition of Pace in 2016. Upon the funding, we incurred an additional $2.3 million of original issuance discounts associated with Term Loan A-1 subsequent to December 31, 2015.
(2) Includes leases which are reflected in restructuring accruals on the consolidated balance sheets.
(3) Represents obligations under agreements with non-cancelable terms to purchase goods or services. The agreements are enforceable and legally binding, and specify terms, including quantities to be purchased and the timing of the purchase.
(4) Approximately $46.2 million of uncertain tax positions have been excluded from the contractual obligation table because we are unable to make reasonably reliable estimates of the period of cash settlement with the respective taxing authorities.

Off-Balance Sheet Arrangements

We do not have any material off-balance sheet arrangements as defined in Item 303(a)(4)(ii) of Regulation S-K.

Cash Flow

Below is a table setting forth the key line items of our Consolidated Statements of Cash Flows (in thousands):

	2015	2014	2013
Cash provided by (used in):			
Operating activities	343,872	459,281	$ 562,716
Investing activities	(45,946)	(124,586)	(1,889,502)
Financing activities	(134)	(211,343)	1,637,521
Net increase in cash and cash equivalents	$297,792	$ 123,352	$ 310,735

Operating Activities:

Below are the key line items affecting cash from operating activities (in thousands):

	2015	2014	2013
Consolidated net income (loss)	$ 84,459	$ 327,211	$ (48,760)
Adjustments to reconcile net income (loss) to cash provided by operating activities	395,648	229,213	284,738
Net income including adjustments	480,107	556,424	235,978
(Increase) decrease in accounts receivable	(55,132)	16,796	9,241
(Increase) decrease in inventory	(6,685)	(71,036)	74,111
Increase (decrease) in accounts payable and accrued liabilities	15,065	(116,909)	247,301
All other, net	(89,483)	74,006	(3,915)
Cash provided by operating activities	$343,872	$ 459,281	$562,716

2015 vs. 2014

Consolidated net income including adjustments, as per the table above, decreased $76.3 million during 2015 as compared to 2014 reflecting lower sales and gross margin.

Accounts receivable increased $55.1 million in 2015. This increase was primarily a result of purchasing pattern and payment patterns of our customers. Some international customers have delayed payments as they dealt with exchange rate fluctuations for those purchases contracted in U.S. dollars. Additionally, in 2015, we have higher international accounts receivable. Customers internationally typically have longer payment terms.

Inventory increased by $6.7 million in 2015, reflecting timing of customer requirements and anticipated demand for certain products.

Accounts payable and accrued liabilities increased by $15.1 million in 2015. The significant component of this change was an increase in accounts payable reflecting timing of payments and an increase in deferred revenue, offset by a decrease in accrued liabilities reflecting lower annual bonus accrual, warranty claims paid as well as payment of the liabilities assumed during the ActiveVideo acquisition.

All other accounts, net, include the changes in other receivables, income taxes payable (recoverable), and prepaids. The other receivables represent amounts due from our contract manufacturers for material used in the assembly of our finished goods. The change in our income taxes recoverable account is a result of the timing of the actual estimated tax payments during the year as compared to the actual tax liability for the year. The net change during 2015 was approximately $89.5 million as compared to $74.0 million in 2014.

2014 vs. 2013

Net income including adjustments increased $320.4 million during 2014 as compared to 2013 reflecting higher sales and gross margin.

Accounts receivable decreased $16.8 million in 2014. These decreases were primarily related to the payment patterns of our customers.

Inventory increased by $71.0 million in 2014, primarily as a result of higher CPE inventory levels to protect against potential supply chain disruptions with West Coast port of entry delays, as well as timing of customer requirements. In addition, the decision to in-source the manufacturing of certain product lines resulted in higher levels of component inventory previously held at contract manufacturers.

Accounts payable and accrued liabilities decreased by $116.9 million in 2014. The significant component of this change was a decrease in accounts payable reflecting timing of payments.

All other accounts, net, include the changes in other receivables, income taxes payable (recoverable), and prepaids. The other receivables represent amounts due from our contract manufacturers for material used in the assembly of our finished goods. The change in our income taxes recoverable account is a result of the timing of the actual estimated tax payments during the year as compared to the actual tax liability for the year. The net change during 2014 was approximately $74.0 million as compared to $3.9 million in 2013.

Investing Activities:

Below are the key line items affecting investing activities (in thousands):

	2015	2014	2013
Purchases of property, plant and equipment	$ (49,890)	$ (56,588)	$ (71,443)
Acquisitions, net of cash acquired	(97,905)	—	(2,208,114)
Purchases of investments	(48,566)	(127,780)	(104,626)
Sales of investments	161,824	59,679	479,781
Proceeds from equity investment	2,904	—	14,780
Purchase of intangible assets	(39,340)	—	—
Proceeds from sale-leaseback transaction	24,960	—	—
Other, net	67	103	120
Cash used in investing activities	$ (45,946)	$(124,586)	$(1,889,502)

Purchases of property, plant and equipment — Represents capital expenditures which are mainly for test equipment, laboratory equipment, and computing equipment.

Acquisitions, net of cash acquired — Represents cash investments we have made in our various acquisitions.

Purchases and sales of investments — Represents purchases and sales of securities and other investments.

Proceeds from equity investment — Represent dividend proceeds received from return of an equity investment.

Purchase of intangible assets — Represent primarily the purchase of technology licenses.

Proceeds from sale-leaseback transaction — Represent proceeds received from the sale of land and building that qualified for sale leaseback accounting.

Other, net — Represent cash proceeds received from sale of assets.

Financing Activities:

Below are the key items affecting our financing activities (in thousands):

	2015	2014	2013
Proceeds from issuance of debt	$ —	$ —	$1,925,000
Payment for debt discount	(3,247)	—	(9,853)
Payment of debt obligations	(53,500)	(209,653)	(404,488)
Payment of deferred financing costs	(4,992)	—	(42,724)
Proceeds from sale-leaseback financing transaction	58,729	—	—
Payment of lease financing obligation	(425)	—	—
Repurchase of common stock	(24,999)	—	—
Proceeds from issuance of common stock	16,189	19,196	175,072
Repurchase of shares to satisfy minimum tax withholdings	(46,680)	(29,845)	(12,664)
Excess tax benefits from stock-based compensation plans	3,997	8,959	7,178
Contribution from noncontrolling interest	54,794	—	—
Cash (used in) provided by financing activities	$ (134)	$(211,343)	$1,637,521

Proceeds From issuance of debt — As part of the Motorola Home acquisition, we entered into senior secured credit facilities which comprised of Term Loan A facility of $1.1 billion with a term of five years and Term Loan B facility of $0.8 billion with a term of seven years.

Payment for debt discount — Represents amounts paid to lenders in the form of upfront fees, which have been treated as a reduction in the proceeds received by the Company and are considered a component of the discount on the Term Loans A and B.

Payment of debt obligation — Represents the payment of the convertible debt and the term loans under the senior secured credit facilities plus the payment of debt assumed and settled in conjunction with the closing of the ActiveVideo acquisition in 2015 and SeaWell acquisition in 2014.

Payment of deferred financing costs — Represents the finance fees related to the issuance of the senior secured credit facilities. These costs will be amortized over the life of the term loans and revolving credit facility or written-off on an accelerated basis if optional prepayments are made on the debt.

Proceeds from sale-leaseback financing transaction — Represents the portion of the sale of building that did not qualify for sale-leaseback accounting. As such the sale was recorded as a financing transaction that will be amortized over the ten year lease period.

Payment of lease financing transaction — Represents the amortization related to the portion of the sale of building that did not qualify for sale-leaseback accounting.

Repurchase of common stock — Represents the cash used to buy back the Company's stock.

Proceeds from issuance of common stock — Represents cash proceeds related to the exercise of stock options, offset with expenses paid related to the issuance of stock. It also represents cash proceeds from shares issued to Google and Comcast in relation to the Motorola Home acquisition in 2013.

Repurchase of shares to satisfy minimum tax withholdings — Represents the minimum shares withheld to satisfy the minimum tax withholding when restricted stock units vests.

Excess tax benefits from stock-based compensation plans — Represents the cash that otherwise would have been paid for income taxes if increases in the value of equity instruments also had not been deductible in determining taxable income.

Contribution from noncontrolling interest — This represents the equity investment contributions by the noncontrolling interest in a venture formed between ARRIS and Charter Communications Inc. related to the ActiveVideo acquisition.

Income Taxes Benefit Related to Equity Compensation

During 2015, approximately $20.2 million of U.S. federal tax benefits were obtained from tax deductions arising from equity-based compensation deductions, all of which resulted from 2015 exercises of non-qualified stock options and lapses of restrictions on restricted stock awards. During 2014, approximately $17.2 million of U.S. federal tax benefits were obtained from tax deductions arising from equity-based compensation deductions, all of which resulted from 2014 exercises of non-qualified stock options and lapses of restrictions on restricted stock awards. During 2013, approximately $2.8 million of U.S. federal tax benefits were obtained from tax deductions arising from equity-based compensation deductions, all of which resulted from 2013 exercises of non-qualified stock options and lapses of restrictions on restricted stock awards.

Interest Rates

As described above, all indebtedness under our senior secured credit facilities bears interest at variable rates based on LIBOR plus an applicable spread. We entered into interest rate swap arrangements to convert a notional amount of $625.0 million of our variable rate debt based on one-month LIBOR to a fixed rate. The objective of these swaps is to manage the variability of cash flows in the interest payments related to the portion of the variable rate debt designated as being hedged.

Foreign Currency

A significant portion of our products are manufactured or assembled in China, Mexico and Taiwan, and we have research and development centers outside the United States in, China, England, France, India, Ireland, Northern Ireland, and Sweden. Our sales into international markets have been and are expected in the future to be an important part of our business. These foreign operations are subject to the usual risks inherent in conducting business abroad, including risks with respect to currency exchange rates, economic and political destabilization, restrictive actions and taxation by foreign governments, nationalization, the laws and policies of the United States affecting trade, foreign investment and loans, and foreign tax laws.

We have certain international customers who are billed in their local currency and certain international operations that procure in U.S dollars. We also have certain predictable expenditures for international operations in local currency. Additionally, certain intercompany transactions are denominated in foreign currencies and subject to revaluation. As part of the Pace acquisition, we paid the former Pace shareholders 132.5 pence per share in cash consideration, which is approximately 434.3 million British pounds, in the aggregate, as of January 4, 2016. We use a hedging strategy and enter into forward or currency option contracts based on a percentage of expected foreign currency revenues and expenses. The percentage can vary, based on the predictability of the exposures denominated in the foreign currency. These contracts were settled upon the close of the Pace acquisition in January 2016.

Financial Instruments

In the ordinary course of business, we, from time to time, will enter into financing arrangements with customers. These financial arrangements include letters of credit, commitments to extend credit and guarantees of debt. These agreements could include the granting of extended payment terms that result in longer collection periods for accounts receivable and slower cash inflows from operations and/or could result in the deferral of revenue.

We execute letters of credit and bank guarantees in favor of certain landlords, customers and vendors to guarantee performance on contracts. Certain financial instruments require cash collateral, and these amounts are reported in Other Assets on the Consolidated Balance Sheets. As of December 31, 2015 and 2014, we had approximately $0.8 million and $1.0 million outstanding, respectively, of restricted cash.

Cash, Cash Equivalents, Short-Term Investments and Long-Term Investments

Our cash and cash equivalents (which are highly-liquid investments with an original maturity of three months or less) are primarily held in demand deposit accounts and money market accounts. We hold short-term investments consisting debt securities classified as available-for-sale, which are stated at estimated fair value. The debt securities consist primarily of commercial paper, certificates of deposits, short term corporate obligations and U.S. government agency financial instruments.

We hold cost method investments in private companies. These investments are recorded at $16.6 million and $15.2 million as of December 31, 2015 and 2014, respectively. See Note 7 *Fair Value Measurements* of Notes to the Consolidated Financial Statements for disclosures related to the fair value of our investments.

We have two rabbi trusts that are used as funding vehicles for various deferred compensation plans that were available to certain current and former officers and key executives. We also have deferred retirement salary plans, which were limited to certain current or former officers of a business acquired in 2007. We hold investments to cover the liability.

ARRIS also funds its nonqualified defined benefit plan for certain executives in a rabbi trust.

Capital Expenditures

Capital expenditures are made at a level designed to support the strategic and operating needs of the business. ARRIS's capital expenditures were $49.9 million in 2015 as compared to $56.6 million in 2014 and $71.4 million in 2013. We had no significant commitments for capital expenditures at December 31, 2015. Management expects to invest approximately $60.0 million in capital expenditures for the year 2016.

Deferred Income Tax Assets — Including Net Operating Loss Carryforwards and Research and Development Credit Carryforwards, and Capitalized Research and Experimentation Costs and Valuation Allowances

Deferred income tax assets represent amounts available to reduce income taxes payable on taxable income in future years. Such assets arise because of temporary differences between the financial reporting and tax bases of assets and liabilities, as well as from net operating loss and tax credit carryforwards. We evaluate the recoverability of these future tax deductions and credits by assessing the adequacy of future expected taxable income from all sources, including reversal of taxable temporary differences, forecasted operating earnings and available tax planning strategies. If we conclude that deferred tax assets are more-likely-than-not to not be realized, then we record a valuation allowance against those assets. We continually review the adequacy of the valuation allowances established against deferred tax assets. As part of that review, we regularly project taxable income based on book income projections by legal entity. Our ability to utilize our U.S. federal, state and foreign deferred tax assets is dependent upon our future taxable income by legal entity.

As of December 31, 2015, ARRIS had net operating loss carryforwards for U.S. federal, state, and foreign income tax purposes of approximately $218.9 million, $353.1 million and $54.9 million, respectively. The U.S. federal NOLs expire through 2031. Foreign NOLs related to our Irish subsidiary in the amount of $17.8 million have an indefinite life. Other significant foreign NOLs arise from our Canadian subsidiary ($11.8 million, expiring within 18 years), Dutch subsidiaries ($2.7 million, expiring during the next three years), and French branch ($4.8 million, no expiration), our U.K. branch ($6.1 million, no expiration), our U.K. subsidiary ($1.6 million, no expiration) and our Israeli subsidiary ($5.5 million, no expiration). The net operating losses are subject to various limitations on how and when the losses can be used to offset against taxable income. Approximately $110.1 million of U.S. federal, $154.2 million of state NOLs, and $17.0 million of the foreign NOLs are subject to valuation allowances because we do not believe the ultimate realization of that portion of the deferred tax assets associated with these U.S. federal and state and foreign NOLs is more-likely-than-not.

During 2015, we used approximately $327.1 million of U.S. federal NOLs to reduce taxable income. For state tax filings, we recorded the usage of $66.2 million of pre-apportioned and $30.6 million of post-apportioned U.S. state NOLs to reduce taxable income.

As of December 31, 2014, ARRIS had net operating loss carryforwards for U.S. federal, state, and foreign income tax purposes of approximately $552.9 million, $417.3 million, and $57.8 million, respectively. The U.S. federal NOLs expire through 2031. Foreign NOLs related to our Irish subsidiary in the amount of $18.5 million have an indefinite life. Other significant foreign NOLs arise from our Canadian subsidiary ($13.7 million, expiring within 20 years), Dutch subsidiaries ($3.3 million, expiring during the next eight years), and French branch ($5.4 million, no expiration), our U.K. branch ($6.4 million, no expiration), our U.K. subsidiary ($3.1 million, no expiration), and our Israeli subsidiary ($6.3 million, no expiration). The net operating losses are subject to various limitations on how and when the losses can be used to offset against taxable income. Approximately $178.2 million of U.S. Federal, $228.5 million of state NOLs, and $18.8 million of the foreign NOLs are subject to valuation allowances because we do not believe the ultimate realization of that portion of the deferred tax assets associated with these U.S. federal and state and foreign NOLs is more-likely-than-not.

During 2014, we used approximately $75.2 million of U.S. federal NOLs to reduce taxable income. For state tax filings, we recorded the usage of $54.0 million of post-apportioned and $375.6 million of pre-apportioned U.S. state NOLs to reduce taxable income.

During the tax year ending December 31, 2015, we utilized $0.3 million of U.S. foreign tax credits and $6.5 million of U.S. state research and development tax credits, to offset against U.S. federal and state income tax liabilities. No U.S. Federal research and development tax credits were utilized during 2015. During the tax years ending December 31, 2014, and 2013, we utilized $27.2 million and $5.5 million, respectively of U.S. federal and state research and development tax credits, to offset against U.S. federal and state income tax liabilities. As of December 31, 2015, ARRIS has a deferred tax asset of $70.7 million for U.S. federal research and development tax credits and $28.3 million of for state research and development tax credits. Remaining unutilized U.S. federal research and development tax credits can be carried back one year and carried forward twenty years. Foreign tax credits can be carried forward 10 years. The state research and development tax credits carry forward and will expire pursuant to the various applicable state laws. Approximately $26.9 million of U.S. federal research and development tax credits and $9.9 million of state research and development tax credits are subject to valuation allowances because we do not believe the ultimate realization of the related deferred tax assets is more-likely-than-not.

ARRIS has generally reported taxable income in excess of its pre-tax net book income for financial reporting purposes. A significant reconciling item between the taxable income and the pre-tax net book income has been the book amortization expense relating to the separately stated intangible assets arising from acquisitions. Other significant reconciling items between taxable income and pre-tax net book income are certain reserves that are recorded as expenses for pre-tax net book income purposes which are not deductible for income tax purposes until they are paid. As of December 31, 2015, the Company reports $579.7 million of capitalized research and experimentation costs, which are available to reduce U.S. federal and state taxable income in future years, based on a straight-line method over a ten year life. The costs are amortized over the remaining lives on a straight-line basis, with the final amortization occurring in 2026.

The Company obtains significant benefits from U.S. federal research and development tax credits, which are used to reduce the Company's U.S. federal income tax liability. In December of 2015, the research and development tax credit was made permanent. As a result of this legislation being enacted, the Company recorded a net benefit of $20.4 million in the fourth quarter of 2015.

Defined Benefit Pension Plans

ARRIS sponsors a qualified and a non-qualified non-contributory defined benefit pension plan that cover certain U.S. employees. As of January 1, 2000, we froze the qualified defined pension plan benefits for its participants.

The U.S. pension plan benefit formulas generally provide for payments to retired employees based upon their length of service and compensation as defined in the plans. Our investment policy is to fund the qualified plan as required by the Employee Retirement Income Security Act of 1974 ("ERISA") and to the extent that such contributions are tax deductible. For 2015, the plan assets were comprised of approximately 40% to 45%, 0% to 5% and 50% to 60% of equity securities, debt securities and money market funds, respectively. For 2014, the plan assets were comprised of approximately 43%, 3% and 54% of equity securities, debt securities and money market funds, respectively. For 2016, the plan's current target allocations are 40% to 45% equity securities, 0% to 5% debt securities, and 50% to 60% money market funds. Liabilities or amounts in excess of these funding levels are accrued and reported in the consolidated balance sheets. We have established a rabbi trust to fund the pension obligations of the Chief Executive Officer under his Supplemental Retirement Plan including the benefit under our non-qualified defined benefit plan. In addition, we have established a rabbi trust for certain executive officers and certain senior management personnel to fund the pension liability to those officers under the non-qualified plan. Effective June 30, 2013, ARRIS amended the Supplemental Retirement Plan. This amendment effectively froze entry of any new participants into the Supplemental Plan and, for existing participants, a freeze on any additional benefit accrual after June 30, 2013. The participant's benefit will continue to be distributed in accordance with the provisions of the Supplemental Plan but the final benefit accrual was frozen as of June 30, 2013. A curtailment gain of approximately $0.3 million, which represents the difference in the projected benefit obligation and the accumulated benefit obligation at June 30, 2013, offsets the existing plan loss and lowers future pension expense.

The investment strategies of the plans place a high priority on benefit security. The plans invest conservatively so as not to expose assets to depreciation in adverse markets. The plans' strategy also places a high priority on earning a rate of return greater than the annual inflation rate along with maintaining average market results. The plan has targeted asset diversification across different asset classes and markets to take advantage of economic environments and to also act as a risk minimizer by dampening the portfolio's volatility.

The weighted-average actuarial assumptions used to determine the benefit obligations for the three years presented are set forth below:

	2015	2014	2013
Assumed discount rate for plan participants	4.15%	3.75%	4.50%

The weighted-average actuarial assumptions used to determine the net periodic benefit costs are set forth below:

	2015	2014	2013
Assumed discount rate plan participants	3.75%	4.50%	3.75%
Rate of compensation increase	N/A	N/A	3.75%
Expected long-term rate of return on plan assets	6.00%	6.00%	6.00%

The expected long-term rate of return on assets is derived using the building block approach which includes assumptions for the long term inflation rate, real return, and equity risk premiums.

ARRIS estimates it will make funding contributions of $728 thousand in 2016.

ARRIS also provides a non-contributory defined benefit plan which cover employees in Taiwan ("Taiwan Plan"). Any other benefit plans outside of the U.S. are not material to ARRIS either individually or in the aggregate.

Key assumptions used in the valuation of the Taiwan Plan are as follows:

	2015	2014	2013
Assumed discount rate for obligations	1.70%	1.90%	1.80%
Assumed discount rate for expense	1.90%	1.80%	1.80%
Rate of compensation increase for indirect labor	4.00%	4.50%	4.50%
Rate of compensation increase for direct labor	2.00%	2.00%	2.00%
Expected long-term rate of return on plan assets (1)	2.00%	2.00%	2.00%

(1) Asset allocation is 100% in money market investments

ARRIS estimates it will make funding contributions of $10.4 million in 2016.

Other Benefit Plans

ARRIS has established defined contribution plans pursuant to the Internal Revenue Code Section 401(k) that cover all eligible U.S. employees. We contribute to these plans based upon the dollar amount of each participant's contribution. We made matching contributions to these plans of approximately $16.6 million, $15.3 million, and $10.9 million in 2015, 2014 and 2013, respectively.

We have a deferred compensation plan that does not qualify under Section 401(k) of the Internal Revenue Code and is available to our key executives and certain other employees. Employee compensation deferrals and matching contributions are held in a rabbi trust. The total of net employee deferrals and matching contributions, which is reflected in other long-term liabilities, were $3.6 million and $3.3 million at December 31, 2015 and 2014, respectively. Total expenses included in continuing operations for the matching contributions were approximately $0.1 million in both 2015 and 2014.

We previously offered a deferred compensation arrangement that allowed certain employees to defer a portion of their earnings and defer the related income taxes. As of December 31, 2004, the plan was frozen and no further contributions are allowed. The deferred earnings are invested in a rabbi trust. The total of net employee deferral and matching contributions, which is reflected in other long-term liabilities, was $2.8 million and $2.9 million at December 31, 2015 and 2014, respectively.

We also have a deferred retirement salary plan, which was limited to certain current or former officers of a business acquired in 2007. The present value of the estimated future retirement benefit payments is being accrued over the estimated service period from the date of signed agreements with the employees. The accrued balance of this plan, the majority of which is included in other long-term liabilities, were $1.7 million and $1.8 million at December 31, 2015 and 2014. Total expense (income) included in continuing operations for the deferred retirement salary plan were approximately $0.3 million and $0.1 million for 2015 and 2014, respectively.

Critical Accounting Policies

The accounting and financial reporting policies of ARRIS are in conformity with U.S. generally accepted accounting principles. The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Management has discussed the development and selection of the critical accounting estimates discussed below with the Audit Committee of the Board of Directors and the Audit Committee has reviewed the related disclosures.

a) Revenue Recognition

ARRIS generates revenue as a result of varying activities, including the delivery of stand-alone equipment, custom design and installation services, and bundled sales arrangements inclusive of equipment, software and services. The revenue from these activities is recognized in accordance with applicable accounting guidance and their related interpretations. Revenue is recognized when all of the following criteria have been met:

- *When persuasive evidence of an arrangement exists*. Contracts and customer purchase orders are used to determine the existence of an arrangement. For professional services evidence that an agreement exists includes information documenting the scope of work to be performed, price, and customer acceptance provisions. These are contained in the signed Contract, Purchase Order, or other documentation that shows scope, price and customer acceptance provisions.
- *Delivery has occurred*. Shipping documents, proof of delivery and customer acceptance (when applicable) are used to verify delivery.
- *The fee is fixed or determinable*. Pricing is considered fixed or determinable at the execution of a customer arrangement, based on specific products and quantities to be delivered at specific prices. This

determination includes a review of the payment terms associated with the transaction and whether the sales price is subject to refund or adjustment or future discounts.

- *Collectability is reasonably assured*. We assess the ability to collect from customers based on a number of factors that include information supplied by credit agencies, analyzing customer accounts, reviewing payment history and consulting bank references. Should a circumstance arise where a customer is deemed not creditworthy, all revenue related to the transaction will be deferred until such time that payment is received and all other criteria to allow us to recognize revenue have been met.

Revenue is deferred if any of the above revenue recognition criteria is not met as well as when certain circumstances exist for any of our products or services, including, but not limited to:

- When undelivered products or services that are essential to the functionality of the delivered product exist, revenue is deferred until such undelivered products or services are delivered as the customer would not have full use of the delivered elements.
- When required acceptance has not occurred.
- When trade-in rights are granted at the time of sale, that portion of the sale is deferred until the trade-in right is exercised or the right expires. In determining the deferral amount, management estimates the expected trade-in rate and future value of the product upon trade-in. These factors are periodically reviewed and updated by management, and the updates may result in either an increase or decrease in the deferral.

Equipment — We provide operators with equipment that can be placed within various stages of a broadband system that allows for the delivery of telephony, video and high-speed data as well as outside plant construction and maintenance equipment. For equipment sales, revenue recognition is generally established when the products have been shipped, risk of loss has transferred, objective evidence exists that the product has been accepted, and no significant obligations remain relative to the transaction. Additionally, based on historical experience, ARRIS has established reliable estimates related to sales returns and other allowances for discounts. These estimates are recorded as a reduction to revenue at the time the revenue is initially recorded.

Multiple Element Arrangements — Certain customer transactions may include multiple deliverables based on the bundling of equipment, software and services. When a multiple element arrangement exists, the fee from the arrangement is allocated to the various deliverables, to the extent appropriate, so that the proper amount can be recognized as revenue as each element is delivered. Based on the composition of the arrangement, we analyze the provisions of the accounting guidance to determine the appropriate model that is applied towards accounting for the multiple element arrangement. If the arrangement includes a combination of elements that fall within different applicable guidance, ARRIS follows the provisions of the hierarchal literature to separate those elements from each other and apply the relevant guidance to each.

To determine the estimated selling price in multiple-element arrangements, we first look to establish vendor specific objective evidence (“VSOE”) of the selling price using the prices charged for a deliverable when sold separately. If VSOE of the selling price cannot be established for a deliverable, we look to establish third-party evidence (“TPE”) of the selling price by evaluating the pricing of similar and interchangeable competitor products or services in stand-alone arrangements. However, as our products typically contain a significant element of proprietary technology and may offer substantially different features and functionality from our competitors, we have been unable to obtain comparable pricing information with respect to our competitors’ products. Therefore, we have not been able to obtain reliable evidence of TPE of the selling price. If neither VSOE nor TPE of the selling price can be established for a deliverable, we establish best estimate selling price (“BESP”) by reviewing historical transaction information and considering several other internal factors, including discounting and margin objectives. We regularly review estimated selling price of the product offerings and maintain internal controls over the establishment and updates of these estimates.

Our equipment deliverables typically include proprietary operating system software, which together deliver the essential functionality of our products. Therefore, our equipment are considered non-software elements and are not subject to industry-specific software revenue recognition guidance. For equipment, revenue recognition is generally established when the products have been shipped, risk of loss has transferred, objective evidence exists that the product has been accepted, and no significant obligations remain relative to the transaction.

For arrangements that fall within the software revenue recognition guidance, the fee is allocated to the various elements based on VSOE of fair value. If sufficient VSOE of fair value does not exist for the allocation of revenue to all the various elements in a multiple element arrangement, all revenue from the arrangement is deferred until the earlier of the point at which such sufficient VSOE of fair value is established or all elements within the arrangement are delivered. If VSOE of fair value exists for all undelivered elements, but does not exist for one or more delivered elements, the arrangement consideration is allocated to the various elements of the arrangement using the residual method of accounting. Under the residual method, the amount of the arrangement consideration allocated to the delivered elements is equal to the total arrangement consideration less the aggregate fair value of the undelivered elements. Using this method, any potential discount on the arrangement is allocated entirely to the delivered elements, which ensures that the amount of revenue recognized at any point in time is not overstated. Under the residual method, if VSOE of fair value exists for the undelivered element, generally PCS, the fair value of the undelivered element is deferred and recognized ratably over the term of the PCS contract, and the remaining portion of the arrangement is recognized as revenue upon delivery, which generally occurs upon delivery of the product or implementation of the system. Many of ARRIS's products are sold in combination with customer support and maintenance services, which consist of software updates and product support. Software updates provide customers with rights to unspecified software updates that ARRIS chooses to develop and to maintenance releases and patches that we choose to release during the term of the support period. Product support services include telephone support, remote diagnostics, email and web access, access to on-site technical support personnel and repair or replacement of hardware in the event of damage or failure during the term of the support period. Maintenance and support service fees are recognized ratably under the straight-line method over the term of the contract, which is generally one year. We do not record receivables associated with maintenance revenues without a firm, non-cancelable order from the customer. VSOE of fair value is determined based on the price charged when the same element is sold separately and based on the prices at which our customers have renewed their customer support and maintenance. For elements that are not yet being sold separately, the price established by management, if it is probable that the price, once established, will not change before the separate introduction of the element into the marketplace is used to measure VSOE of fair value for that element.

Software Sold Without Tangible Equipment — While not significant, ARRIS does sell internally developed software as well as software developed by outside third parties that does not require significant production, modification or customization. For arrangements that contain only software and the related post-contract support, we recognize revenue in accordance with the applicable software revenue recognition guidance. If the arrangement includes multiple elements that are software only, then the software revenue recognition guidance is applied and the fee is allocated to the various elements based on vendor-specific objective evidence ("VSOE") of fair value. If sufficient VSOE of fair value does not exist for the allocation of revenue to all the various elements in a multiple element software arrangement, all revenue from the arrangement is deferred until the earlier of the point at which such sufficient VSOE of fair value is established or all elements within the arrangement are delivered. If VSOE of fair value exists for all undelivered elements, but does not exist for one or more delivered elements, the arrangement consideration is allocated to the various elements of the arrangement using the residual method of accounting. Under the residual method, the amount of the arrangement consideration allocated to the delivered elements is equal to the total arrangement consideration less the aggregate fair value of the undelivered elements. Under the residual method, if VSOE of fair value exists for the undelivered element, generally post contract support ("PCS"), the fair value of the undelivered element is deferred and recognized ratably over the term of the PCS contract, and the remaining portion of the arrangement is recognized as revenue upon delivery. If sufficient VSOE of fair value does not exist for PCS, revenue for the arrangement is recognized ratably over the term of support.

Standalone Services — Installation, training, and professional services are generally recognized as service revenue when performed or upon completion of the service when the final act is significant in relation to the overall service transaction. The key element for Professional Services in determining when service transaction revenue has been earned is determining the pattern of delivery or performance which determines the extent to which the earnings process is complete and the extent to which customers have received value from services provided. The delivery or performance conditions of our service transactions are typically evaluated under the proportional performance or completed performance model.

Incentives — Customer incentive programs that include consideration, primarily rebates/credits to be used against future product purchases and certain volume discounts, are recorded as a reduction of revenue when the shipment of the requisite equipment occurs.

Value Added Resellers — ARRIS typically employs the sell-in method of accounting for revenue when using a Value Added Reseller (“VAR”) as our channel to market. Because product returns are restricted, revenue under this method is generally recognized at the time of shipment to the VAR provided all criteria for recognition are met. There are occasions, based on facts and circumstances surrounding the VAR transaction, where ARRIS will employ the sell-through method of recognizing revenue and defer that revenue until payment occurs.

Retail — Some of our product is sold through retail channels, which may include provisions involving a right of return. Upon shipment of the product, we reduce revenue for an estimate of potential future product returns related to the current period product revenue. Management analyzes historical returns, channel inventory levels, and current economic trends related to our products when evaluating the adequacy of the allowance for sales returns. When applicable, revenue on shipments is reduced for estimated price protection and sales incentives that are deemed to be contra-revenue under the authoritative guidance for revenue recognition.

b) Goodwill and Intangible Assets

Intangible assets are classified into three categories: (1) intangible assets with definite lives subject to amortization, (2) intangible assets with indefinite lives not subject to amortization and (3) goodwill. For intangible assets with definite lives, tests for impairment must be performed if conditions exist that indicate the carrying value may not be recoverable. For intangible assets with indefinite lives and goodwill, tests for impairment must be performed at least annually or more frequently if events or circumstances indicate that assets might be impaired.

The following table presents the carrying values of intangible assets included in our consolidated balance sheet (in thousands):

December 31, 2015	Carrying Value	Percentage of Total Assets
Goodwill	$1,013,963	22%
Definite-lived intangible assets, net	804,548	18%
Indefinite-lived intangible assets	5,900	—
Total	$1,824,411	40%

<u>*Other Intangible Assets*</u>

When facts and circumstances indicate that the carrying value of definite-lived intangible assets may not be recoverable, management assesses the recoverability of the carrying value by preparing estimates of sales volume and the resulting profit and cash flows. Examples of such circumstances include, but are not limited to, operating or cash flow losses from the use of such assets or changes in our intended uses of such assets. These estimated future cash flows are consistent with those we use in our internal planning. To test for recovery, we group assets (an “asset group”) in a manner that represents the lowest level for which identifiable cash flows are largely independent of the cash flows of other groups of assets and liabilities. If the sum of the expected future cash flows (undiscounted and pre-tax based upon policy decision) is less than the carrying amount, we recognize an impairment loss. The impairment loss recognized is the amount by which the carrying amount of the asset or asset group exceeds the fair value. We use a variety of methodologies to determine the fair value of these assets, including discounted cash flow models, which are consistent with the assumptions we believe hypothetical marketplace participants would use.

We test intangible assets determined to have indefinite useful lives, including certain trademarks, in-process research and development and goodwill, for impairment annually, or more frequently if events or circumstances indicate that assets might be impaired. We perform these annual impairment reviews as of the first day of our fourth fiscal quarter (October 1). We use a variety of methodologies in conducting impairment assessments of indefinite-lived intangible assets, including, but not limited to, discounted cash flow models, which are based on the assumptions we believe hypothetical marketplace participants would use. For indefinite-lived intangible assets, other than goodwill, if the carrying amount exceeds the fair value, an impairment charge is recognized in an amount equal to that excess. Acquired in-process research and development assets are initially recognized and measured at fair value and classified as indefinite-lived assets until the successful completion or abandonment of the associated research and development efforts. Accordingly, during the development period after acquisition, this asset is not amortized as charges to earnings. Completion of the associated research and development efforts would cause the indefinite-lived in-process research and development assets to become a definite-lived asset. As such, prior to commencing amortization the assets is tested for impairment.

We have the option to perform a qualitative assessment of indefinite-lived intangible assets, other than goodwill, prior to completing the impairment test described above. The Company must assess whether it is more likely than not that the fair value of the intangible asset is less than its carrying amount. If the Company concludes that this is the case, it must perform the testing described above. Otherwise, the Company does not need to perform any further assessment.

Assumptions and estimates about future values and remaining useful lives of our acquired intangible assets are complex and subjective. They can be affected by a variety of factors, including external factors such as industry and economic trends and internal factors such as changes in our business strategy and our internal forecasts.

There were no impairment charges related to intangible assets (definite-lived and indefinite-lived), other than goodwill, during 2015, 2014 and 2013. Our ongoing consideration of all the factors described previously could result in additional impairment charges in the future, which could adversely affect our net income.

Goodwill

We perform impairment tests of goodwill at our reporting unit level, which is at or one level below our operating segments. For purposes of impairment testing, our reporting units are based on our organizational structure, the financial information that is provided to and reviewed by segment management and aggregation criteria applicable to component businesses that are economically similar. Our operating segments are primarily based on the nature of the products and services offered, which is consistent with the way management runs our business. Our Customer Premises Equipment operating segment is the same as the reporting unit. Our Network & Cloud operating segment is subdivided into three reporting units which are Network Infrastructure, Cloud Services, and Cloud TV. Goodwill is assigned to the reporting unit or units that benefit from the synergies arising from each business combination.

The goodwill impairment test consists of a two-step process, if necessary. The first step is to compare the fair value of a reporting unit to its carrying value, including goodwill. We typically use a weighting of income approach using discounted cash flow models and a market approach to determine the fair value of a reporting unit. The assumptions used in these models are consistent with those we believe hypothetical marketplace participants would use. Under the income approach, we calculate the fair value of a reporting unit based on the present value of estimated future cash flows. The discounted cash flow analysis requires us to make various judgmental assumptions, including assumptions about future cash flows, growth rates and weighted average cost of capital (discount rate). The assumptions about future cash flows and growth rates are based on the current and long-term business plans of each reporting unit. Discount rate assumptions are based on an assessment of the risk inherent in the future cash flows of the respective reporting units. Under the market approach, we estimate the fair value based upon Market multiples of revenue and earnings derived from publicly traded companies with similar operating and investment characteristics as the reporting unit. The weighting of the fair value derived from the market approach ranges from 0% to 50% depending on the level of comparability of these publicly-traded companies to the reporting unit. When market comparable are not meaningful or not available, we may estimate the fair value of a reporting unit using only the income approach. We considered the relative strengths and weaknesses inherent in the valuation methodologies utilized in each approach and consulted with a third party valuation specialist to assist in determining the appropriate weighting.

In order to assess the reasonableness of the calculated fair values of our reporting units, we also compare the sum of the reporting units' fair values to our market capitalization and calculate an implied control premium (the excess of the sum of the reporting units' fair values over the market capitalization). We evaluate the control premium by comparing it to the fair value estimates of the reporting unit. If the implied control premium is not reasonable in light of the analysis, we will reevaluate the fair value estimates of the reporting unit by adjusting the discount rates and/or other assumptions. If the fair value of the reporting unit is less than its carrying value, the second step of the impairment test must be performed in order to determine the amount of impairment loss, if any. The second step compares the implied fair value of the reporting unit's goodwill with the carrying amount of that goodwill. If the carrying amount of the reporting unit's goodwill exceeds its implied fair value, an impairment charge is recognized in an amount equal to that excess. The loss recognized cannot exceed the carrying amount of goodwill.

The Company has the option to perform a qualitative assessment of goodwill prior to completing the two-step process described above to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill and other intangible assets. If the Company concludes that this is the case, it must perform the two-step process. Otherwise, the Company will forego the two-step process and does not need to perform any further testing.

Assumptions and estimates about future cash flows and discount rates are complex and often subjective. They are sensitive to changes in underlying assumptions and can be affected by a variety of factors, including external factors such as industry and economic trends, and internal factors such as changes in our business strategy and our internal forecasts. Our assessment includes significant estimates and assumptions including the timing and amount of future discounted cash flows, the discount rate and the perpetual growth rate used to calculate the terminal value.

Our discounted cash flow analysis included projected cash flows over a ten-year period, using our three-year business plans plus an additional seven years of projected cash flows based on the most recent three-year plan. These forecasted cash flows took into consideration management's outlook for the future and were compared to historical performance to assess reasonableness. A discount rate was applied to the forecasted cash flows. The discount rate considered market and industry data, as well as the specific risk profile of the reporting unit. A terminal value was calculated, which estimates the value of annual cash flow to be received after the discrete forecast periods. The terminal value was based upon an exit value of annual cash flow after the discrete forecast period in year ten.

Examples of events or circumstances that could reasonably be expected to negatively affect the underlying key assumptions and ultimately impact the estimated fair value of our reporting units may include such items as the following:

- a prolonged decline in capital spending for constructing, rebuilding, maintaining, or upgrading broadband communications systems;
- rapid changes in technology occurring in the broadband communication markets which could lead to the entry of new competitors or increased competition from existing competitors that would adversely affect our sales and profitability;
- the concentration of business we receive from several key customers, the loss of which would have a material adverse effect on our business;
- continued consolidation of our customers base in the telecommunications industry could result in delays or reductions in purchases of our products and services, if the acquirer decided not to continue using us as a supplier;

- new products and markets currently under development may fail to realize anticipated benefits;
- changes in business strategies affecting future investments in businesses, products and technologies to complement or expand our business could result in adverse impacts to existing business and products;
- volatility in the capital (equity and debt) markets, resulting in a higher discount rate; and
- legal proceeding settlements and/or recoveries, and its effect on future cash flows.

As a result, there can be no assurance that the estimates and assumptions made for purposes of the annual goodwill impairment test will prove to be accurate predictions of the future. Although management believes the assumptions and estimates made are reasonable and appropriate, different assumptions and estimates could materially impact the reported financial results.

There was no impairment of goodwill resulting from our annual impairment testing in 2015, 2014 and 2013.

a) Accounts Receivable and Allowance for Doubtful Accounts and Sales Returns

Accounts receivable are stated at amounts owed by the customers, net of allowance for doubtful accounts, sales returns and allowances. We establish a reserve for doubtful accounts based upon our historical experience and leading market indicators in collecting accounts receivable. A majority of our accounts receivable are from a few large cable system operators and telecommunication companies, either with investment rated debt outstanding or with substantial financial resources, and have favorable payment histories. If we were to have a collection problem with one of our major customers, it is possible the reserve will not be sufficient. We calculate our reserve for uncollectible accounts using a model that considers customer payment history, recent customer press releases, bankruptcy filings, if any, Dun & Bradstreet reports, and financial statement reviews. Our calculation is reviewed by management to assess whether there needs to be an adjustment to the reserve for uncollectible accounts. The reserve is established through a charge to the provision and represents amounts of current and past due customer receivable balances of which management deems a loss to be both probable and estimable. Accounts receivable are charged to the allowance when determined to be no longer collectible.

In the event that we are not able to predict changes in the financial condition of our customers, resulting in an unexpected problem with collectability of receivables and our actual bad debts differ from estimates, or we adjust estimates in future periods, our established allowances may be insufficient and we may be required to record additional allowances. Alternatively, if we provided more allowances than are ultimately required, we may reverse a portion of such provisions in future periods based on our actual collection experience. In the event we adjust our allowance estimates, it could materially affect our operating results and financial position.

We also establish a reserve for sales returns and allowances. The reserve is an estimate of the impact of potential returns based upon historic trends.

d) Inventory Valuation

Inventory is stated at the lower of market cost. Inventory cost is determined on a first-in, first-out basis. The cost of work-in-process and finished goods is comprised of material, labor and overhead.

We continuously evaluate future usage of product and where supply exceeds demand, we may establish a reserve. In reviewing inventory valuations, we also review for obsolete items. This evaluation requires us to estimate future usage, which, in an industry where rapid technological changes and significant variations in capital spending by system operators are prevalent, is difficult. As a result, to the extent that we have overestimated future usage of inventory, the value of that inventory on our financial statements may be overstated. When we believe that we have overestimated our future usage, we adjust for that overstatement through an increase in cost of sales in the period identified as the inventory is written down to its net realizable value. Inherent in our valuations are certain management judgments and estimates, including markdowns, shrinkage, manufacturing schedules, possible alternative uses and future sales forecasts, which can significantly impact ending inventory valuation and gross margin. The methodologies utilized by ARRIS in its application of the above methods are consistent for all periods presented.

We conduct physical inventory counts at all ARRIS locations, either annually or through ongoing cycle-counts, to confirm the existence of our inventory.

e) Warranty

We offer warranties of various lengths to our customers depending on product specifics and agreement terms with our customers. We provide, by a current charge to cost of sales in the period in which the related revenue is recognized, an estimate of future warranty obligations. The estimate is based upon historical experience. The embedded product base, failure rates, cost to repair and warranty periods are used as a basis for calculating the estimate. We also provide, via a charge to current cost of sales, estimated expected costs associated with non-recurring product failures. In the event of a significant non-recurring product failure, the amount of the reserve may not be sufficient. In the event that our historical experience of product failure rates and costs of correcting product failures change, our estimates relating to probable losses resulting from a significant non-recurring product failure changes, or to the extent that other non-recurring warranty claims occur in the future, we may be required to record additional warranty reserves. Alternatively, if we provided more reserves than we needed, we may reverse a portion of such provisions in future periods. In the event we change our warranty reserve estimates, the resulting charge against future cost of sales or reversal of previously recorded charges may materially affect our operating results and financial position.

f) Income Taxes

Considerable judgment must be exercised in determining the proper amount of deferred income tax assets to record on the balance sheet and also in concluding as to the correct amount of income tax liabilities relating to uncertain tax positions.

Deferred income tax assets must be evaluated quarterly and a valuation allowance should be established and maintained when it is more-likely-than-not that all or a portion of deferred income tax assets will not be realized. In determining the likelihood of realizing deferred income tax assets, management must consider all positive and negative evidence, such as the probability of future taxable income, tax planning, and the historical profitability of the entity in the jurisdiction where the asset has been recorded. Significant judgment must also be utilized by management in modeling the future taxable income of a legal entity in a particular jurisdiction. Whenever management subsequently concludes that it is more-likely-than-not that a deferred income tax asset will be realized, the valuation allowance must be partially or totally removed.

Uncertain tax positions occur, and a resulting income tax liability is recorded, when management concludes that an income tax position fails to achieve a more-likely-than-not recognition threshold. In evaluating whether or not an income tax position is uncertain, management must presume the income tax position will be examined by the relevant taxing authority that has full knowledge of all relevant information and management must consider the technical merits of an income tax position based on the statutes, legislative intent, regulations, rulings and case law specific to each income tax position. Uncertain income tax positions must be evaluated quarterly and, when they no longer fail to meet the more-likely-than-not recognition threshold, the related income tax liability must be derecognized.

Forward-Looking Statements

Certain information and statements contained in this Management’s Discussion and Analysis of Financial Condition and Results of Operations and other sections of this report, including statements using terms such as “may,” “expect,” “anticipate,” “intend,” “estimate,” “believe,” “plan,” “continue,” “could be,” or similar variations thereof, constitute forward-looking statements with respect to the financial condition, results of operations, and business of ARRIS, including statements that are based on current expectations, estimates, forecasts, and projections about the markets in which we operate and management’s beliefs and assumptions regarding these markets. These and any other statements in this document that are not statements about historical facts also are “forward-looking statements.” We caution investors that forward-looking statements made by us are not guarantees of future performance and that a variety of factors could cause our actual results to differ materially from the anticipated results or other expectations expressed in our forward-looking statements. Important factors that could cause results or events to differ from current expectations are described in the risk factors set forth in Item 1A, "Risk Factors." These factors are not intended to be an all-encompassing list of risks and uncertainties that may affect the operations, performance, development and results of our business, but instead are the risks that we currently perceive as potentially being material. In providing forward-looking statements, ARRIS expressly disclaims any obligation to update publicly or otherwise these statements, whether as a result of new information, future events or otherwise except to the extent required by law.

Item 7A. ***Quantitative and Qualitative Disclosures About Market Risk***

We are exposed to various market risks, including interest rates and foreign currency rates. The following discussion of our risk-management activities includes "forward-looking statements" that involve risks and uncertainties. Actual results could differ materially from those projected in the forward-looking statements.

A significant portion of our products are manufactured or assembled in China, Mexico and Taiwan, and we have research and development centers outside the United States in China, England, France, India, Ireland, Northern Ireland and Sweden. Our sales into international markets have been and are expected in the future to be an important part of our business. These foreign operations are subject to the usual risks inherent in conducting business abroad, including risks with respect to currency exchange rates, economic and political destabilization, restrictive actions and taxation by foreign governments, nationalization, the laws and policies of the United States affecting trade, foreign investment and loans, and foreign tax laws.

We have certain international customers who are billed in their local currency, and we have certain predictable expenditures for international operations in local currency. Additionally, certain intercompany transactions are denominated in foreign currencies and subject to revaluation. Changes in the monetary exchange rates may adversely affect our results of operations and financial condition. To manage the volatility relating to these typical business exposures, we use a hedging strategy and may enter into various derivative transactions, when appropriate. We do not hold or issue derivative instruments for trading or other speculative purposes. The euro is the predominant currency of the customers who are billed in their local currency. Additionally, we face certain other working capital exposures related to both the euro and the British pound, and we are also subject to the revaluation of one of our long-term pension obligations denominated in the New Taiwan dollar. Taking into account the effects of foreign currency fluctuations of the euro, the British pound, the New Taiwan dollar, Australian dollar and Canadian dollar versus the U.S. dollar, a hypothetical 10% appreciation or depreciation in the value of the U.S. dollar against these foreign currencies from the prevailing market rates would result in a corresponding decrease or increase, respectively, of $5.1 million in the underlying exposures as of December 31, 2015.

All indebtedness under our senior secured credit facilities bears interest at variable rates based on LIBOR plus an applicable spread. We entered into interest rate swap arrangements to convert a notional amount of $625.0 million of our variable rate debt based on one-month LIBOR to a fixed rate. This objective of these swaps is to manage the variability of cash flows in the interest payments related to the portion of the variable rate debt designated as being hedged.

Item 8. ***Consolidated Financial Statements and Supplementary Data***

The report of our independent registered public accounting firm and consolidated financial statements and notes thereto for the Company are included in this Report and are listed in the Index to Consolidated Financial Statements.

Item 9. ***Changes in and Disagreements with Accountants on Accounting and Financial Disclosure***

Not Applicable

Item 9A. ***Controls and Procedures***

(a) *Evaluation of Disclosure Controls and Procedures.* Our principal executive officer and principal financial officer evaluated the effectiveness of our disclosure controls and procedures (as such term is defined in

Rule 13a-15(e) under the Securities Exchange Act of 1934 as of the end of the period covered by this report (the "Evaluation Date"). Based on that evaluation, such officers concluded that, as of the Evaluation Date, our disclosure controls and procedures were effective as contemplated by the Act.

(b) *Changes in Internal Control over Financial Reporting*. Our principal executive officer and principal financial officer evaluated the changes in our internal control over financial reporting that occurred during the most recent fiscal quarter. Based on that evaluation, our principal executive officer and principal financial officer concluded that, there had been no change in our internal control over financial reporting during the most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

On January 4, 2016 we completed our acquisition of Pace and we are in the process of implementing our internal controls over financial reporting for Pace. Accordingly, as permitted by SEC rules, the assessment of internal controls over financial reporting described above excludes the entities acquired as part of the Pace acquisition.

Item 9B. ***Other Information***

Not Applicable

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

ARRIS Group, Inc.'s management is responsible for establishing and maintaining an adequate system of internal control over financial reporting as required by the Sarbanes-Oxley Act of 2002 and as defined in Exchange Act Rule 13a-15(f). A control system can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

Under management's supervision, an evaluation of the design and effectiveness of ARRIS Group, Inc.'s internal control over financial reporting was conducted based on the framework in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework)(COSO). Based on this evaluation, management concluded that ARRIS Group, Inc.'s internal control over financial reporting was effective as of December 31, 2015.

The effectiveness of ARRIS Group, Inc.'s internal control over financial reporting as of December 31, 2015 has been audited by Ernst & Young LLP, an independent registered public accounting firm retained as auditors of ARRIS Group, Inc.'s financial statement, as stated in their report which is included herein.

/s/ R J STANZIONE
Robert J. Stanzione
Chief Executive Officer, Chairman

/s/ DAVID B, POTTS
David B. Potts
Executive Vice President, Chief Financial Officer and Chief
Accounting Officer

February 29, 2016

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of ARRIS International plc.

We have audited ARRIS Group, Inc.'s internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). ARRIS Group, Inc.'s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) 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 (3) 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.

In our opinion, ARRIS Group, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of ARRIS Group, Inc. as of December 31, 2015 and 2014, and the related consolidated statements of operations, comprehensive income (loss), cash flows, and stockholders' equity for each of the three years in the period ended December 31, 2015, and our report dated February 29, 2016, expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Atlanta, Georgia
February 29, 2016

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Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of ARRIS International plc.

We have audited the accompanying consolidated balance sheets of ARRIS Group, Inc. as of December 31, 2015 and 2014, and the related consolidated statements of operations, comprehensive income (loss), cash flows and stockholders' equity for each of the three years in the period ended December 31, 2015. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of ARRIS Group, Inc. at December 31, 2015 and 2014, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2015, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), ARRIS Group, Inc.'s internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 29, 2016 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Atlanta, Georgia
February 29, 2016

ARRIS GROUP, INC.

CONSOLIDATED BALANCE SHEETS

	December 31, 2015	December 31, 2014
	(in thousands except share and per share data)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 863,582	$ 565,790
Short-term investments, at fair value	15,470	126,748
Total cash, cash equivalents and short-term investments	879,052	692,538
Accounts receivable (net of allowances for doubtful accounts of $9,975 in 2015 and $6,392 in 2014)	651,893	598,603
Other receivables	12,233	10,640
Inventories (net of reserves of $57,026 in 2015 and $62,359 in 2014)	401,592	401,165
Prepaid income taxes	25,624	11,023
Prepaids	19,319	27,497
Current deferred income taxes	—	113,390
Other current assets	120,490	55,257
Total current assets	2,110,203	1,910,113
Property, plant and equipment (net of accumulated depreciation of $304,532 in 2015 and $265,811 in 2014)	312,311	366,431
Goodwill	1,013,963	936,067
Intangible assets (net of accumulated amortization of $850,873 in 2015 and $619,283 in 2014)	810,448	943,388
Investments	69,542	77,640
Noncurrent deferred income taxes	185,439	71,686
Other assets	21,610	35,717
Total assets	$ 4,523,516	$ 4,341,042
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 514,877	$ 480,150
Accrued compensation, benefits and related taxes	111,389	145,278
Accrued warranty	27,630	42,763
Deferred revenue	137,606	92,772
Current portion of long-term debt and lease financing obligation	43,591	67,024
Income taxes payable	8,368	10,610
Other accrued liabilities	169,169	165,080
Total current liabilities	1,012,630	1,003,677
Long-term debt and lease financing obligation, net of current portion	1,496,243	1,448,960
Accrued pension	64,052	64,917
Noncurrent income taxes	42,197	41,082
Noncurrent deferred income taxes	503	274
Other noncurrent liabilities	66,930	91,371
Total liabilities	2,682,555	2,650,281
Stockholders' equity:		
Preferred stock, par value $1.00 per share, 5.0 million shares authorized; none issued and outstanding	—	—
Common stock, par value $0.01 per share, 320.0 million shares authorized; 147.5 million and 145.1 million shares issued and outstanding in 2015 and 2014, respectively	1,790	1,796
Capital in excess of par value	1,777,276	1,739,700
Treasury stock at cost, 35.1 million shares and 34.2 million shares in 2015 and 2014, respectively	(331,329)	(306,330)
Retained earnings	358,823	266,642
Accumulated other comprehensive income	(12,646)	(11,047)
Total ARRIS Group, Inc. stockholders' equity	1,793,914	1,690,761
Stockholders' equity attributable to noncontrolling interest	47,047	—
Total stockholders' equity	1,840,961	1,690,761
Total liabilities and stockholders' equity	$ 4,523,516	$ 4,341,042

See accompanying notes to the consolidated financial statements.

ARRIS GROUP, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

	For the Years Ended December 31,		
	2015	2014	2013
	(in thousands, except per share data)		
Net sales	$4,798,332	$5,322,921	$3,620,902
Cost of sales	3,379,409	3,740,425	2,598,154
Gross margin	1,418,923	1,582,496	1,022,748
Operating expenses:			
Selling, general, and administrative expenses	417,085	410,568	338,252
Research and development expenses	534,168	556,575	425,825
Amortization of intangible assets	227,440	236,521	193,637
Integration, acquisition, restructuring and other costs	29,277	37,498	83,047
Total operating expenses	1,207,970	1,241,162	1,040,761
Operating income (loss)	210,953	341,334	(18,013)
Other expense (income):			
Interest expense	70,936	62,901	67,888
Loss on investments	6,220	10,961	2,698
Loss (gain) on foreign currency	20,761	2,637	(3,502)
Interest income	(2,379)	(2,590)	(2,936)
Other expense (income), net	8,362	28,195	13,989
Income (loss) before income taxes	107,053	239,230	(96,150)
Income tax expense (benefit)	22,594	(87,981)	(47,390)
Consolidated net income (loss)	84,459	327,211	(48,760)
Net loss attributable to noncontrolling interest	(7,722)	—	—
Net income (loss) attributable to ARRIS Group, Inc.	$ 92,181	$ 327,211	$ (48,760)
Net income (loss) per common share (1):			
Basic	$ 0.63	$ 2.27	$ (0.37)
Diluted	$ 0.62	$ 2.21	$ (0.37)
Weighted average common shares:			
Basic	146,388	144,386	131,980
Diluted	149,359	148,280	131,980

(1) Calculated based on net income attributable to shareowners of ARRIS Group, Inc.

See accompanying notes to the consolidated financial statements.

ARRIS GROUP, INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	For the Years Ended December 31,		
	2015	2014	2013
		(in thousands)	
Consolidated net income (loss)	$ 84,459	$ 327,211	$ (48,760)
Available-for-sale securities:			
Unrealized gain (loss) on available-for-sale securities, net of tax (expense) benefit of $37, $73 and $(19) in 2015, 2014 and 2013, respectively	(64)	(127)	65
Reclassification adjustments recognized in net income, net of tax (expense) benefit of $(100), $89 and $(10) in 2015, 2014 and 2013, respectively	172	(154)	35
Net change in available-for-sale	108	(281)	100
Derivative instruments:			
Unrealized loss on derivative instruments, net of tax benefit of $4,936, $3,149 and $2,613 in 2015, 2014 and 2013, respectively	(8,319)	(5,391)	(4,527)
Reclassification adjustments recognized in net income, net of tax expense of $(2,791), $(2,784) and $(1,146) in 2015, 2014 and 2013, respectively	4,704	4,766	1,986
Net change in derivative instruments	(3,615)	(625)	(2,541)
Pension liabilities:			
Unrealized gain (loss) on pension liability, net of tax (expense) benefit of $(1,082), $2,709 and $(982) in 2015, 2014 and 2013, respectively	2,044	(5,273)	4,670
Reclassification adjustments recognized in net income, net of tax expense of $(498), $(261) and $(309) in 2015, 2014 and 2013, respectively	942	508	1,472
Net change in pension liabilities	2,986	(4,765)	6,142
Cumulative translation adjustments	(1,078)	(714)	173
Other comprehensive income (loss), net of tax	(1,599)	(6,385)	3,874
Comprehensive income (loss)	82,860	320,826	(44,886)
Comprehensive income (loss) attributable to noncontrolling interest	(7,747)	—	—
Comprehensive income (loss) attributable to ARRIS Group, Inc.	$ 90,607	$ 320,826	$ (44,886)

See accompanying notes to the consolidated financial statements.

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ARRIS GROUP, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2015	2014	2013
		(in thousands)	
Operating activities:			
Consolidated net income (loss)	$ 84,459	$ 327,211	$ (48,760)
Depreciation	71,780	78,988	61,516
Amortization of intangible assets	231,590	236,751	193,637
Amortization of deferred financing fees and debt discount	9,646	11,575	9,982
Deferred income tax provision (benefit)	5,418	(163,485)	(55,763)
Stock compensation expense	64,218	53,799	35,789
Provision for doubtful accounts	2,997	5,336	(658)
Revenue reduction related to Comcast's investment in ARRIS	—	—	13,182
Mark-to-market fair value adjustment related to Comcast's investment in ARRIS	—	—	13,189
Non-cash restructuring and related charges	—	—	6,761
Non-cash interest expense on convertible notes	—	—	9,926
Loss on disposal and write down of assets	7,776	4,247	1,657
Loss on investments	6,220	10,961	2,698
Excess income tax benefits from stock-based compensation plans	(3,997)	(8,959)	(7,178)
Changes in operating assets and liabilities, net of effect of acquisitions and dispositions:			
Accounts receivable	(55,132)	16,796	9,241
Other receivables	(6,017)	(2,997)	(2,182)
Inventories	(6,685)	(71,036)	74,111
Accounts payable and accrued liabilities	15,065	(116,909)	247,301
Prepaids and other, net	(83,466)	77,003	(1,733)
Net cash provided by operating activities	343,872	459,281	562,716
Investing activities:			
Purchases of investments	(48,566)	(127,780)	(104,626)
Sales of investments	161,824	59,679	479,781
Proceeds from equity investments	2,904	—	14,780
Purchases of property, plant and equipment	(49,890)	(56,588)	(71,443)
Purchases of intangible assets	(39,340)	—	—
Proceeds from sale-leaseback transaction	24,960	—	—
Acquisition, net of cash acquired	(97,905)	—	(2,208,114)
Other, net	67	103	120
Net cash used in investing activities	(45,946)	(124,586)	(1,889,502)

See accompanying notes to the consolidated financial statements.

ARRIS GROUP, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS (Continued)

	Years Ended December 31,		
	2015	2014	2013
		(in thousands)	
Financing activities:			
Proceeds from issuance of common stock, net	$ 16,189	$ 19,196	$ 175,072
Repurchase of common stock	(24,999)	—	—
Excess income tax benefits from stock-based compensation plans	3,997	8,959	7,178
Repurchase of shares to satisfy employee minimum tax withholdings	(46,680)	(29,845)	(12,664)
Proceeds from issuance of debt	—	—	1,925,000
Payment of debt obligations	(53,500)	(209,653)	(404,488)
Payment of lease financing obligation	(425)	—	—
Proceeds from sale-leaseback financing transaction	58,729	—	—
Payment for debt discount	(3,247)	—	(9,853)
Payment for deferred financing fees	(4,992)	—	(42,724)
Contribution from noncontrolling interest	54,794	—	—
Net cash (used in) provided by financing activities	(134)	(211,343)	1,637,521
Net increase in cash and cash equivalents	297,792	123,352	310,735
Cash and cash equivalents at beginning of year	565,790	442,438	131,703
Cash and cash equivalents at end of year	$863,582	$ 565,790	$ 442,438
Supplemental cash flow information:			
Interest paid during the year	$ 60,798	$ 51,122	$ 48,008
Income taxes paid during the year	$ 39,065	$ 37,152	$ 12,470
Non-cash investing and financing activities: debt assumed in acquisition	$ 15,000	$ —	$ —

Supplemental cash flow information:

As part of the acquisition agreement entered into with the Motorola Home acquisition, in the third quarter of 2013 the Company received $85 million in cash for indemnification of certain retained litigation by the seller for which the Company remitted payment of $85 million as settlement. This has been reflected in the cash flows from operating activities.

In addition to the $85 million discussed in the aforementioned paragraph, the Company also settled a retained litigation for $196 million, $50 million of which was paid directly by the Company and the remaining indemnified and paid by Google. Since the Company had the right to receive the cash from Google and the obligation to pay the amount to a third party, we have included the gross amounts in the cash flows from operating activities.

See accompanying notes to the consolidated financial statements.

ARRIS GROUP, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Common Stock	Capital in Excess of Par Value	Treasury Stock	Retained Earnings (Accumulated Deficit)	Accumulated Other Comprehensive Loss	Total ARRIS Group, Inc. stockholders' equity	Non-controlling Interest	Total stockholders' equity
Balance, January 1, 2013	$ 1,488	$1,285,575	$(306,330)	$ (11,809)	$ (8,536)	$ 960,388	$ —	$ 960,388
Net loss	—	—	—	(48,760)	—	(48,760)	—	(48,760)
Other comprehensive income (loss), net of tax	—	—	—	—	3,874	3,874	—	3,874
Compensation under stock award plans	—	35,789	—	—	—	35,789	—	35,789
Issuance of common stock and other	278	365,010	—	—	—	365,288	—	365,288
Income tax benefit related to exercise of stock options	—	2,408	—	—	—	2,408	—	2,408
Balance, December 31, 2013	1,766	1,688,782	(306,330)	(60,569)	(4,662)	1,318,987		1,318,987
Net income	—	—	—	327,211	—	327,211	—	327,211
Other comprehensive income (loss), net of tax	—	—	—	—	(6,385)	(6,385)	—	(6,385)
Compensation under stock award plans	—	53,799	—	—	—	53,799	—	53,799
Issuance of common stock and other	30	(10,679)	—	—	—	(10,649)	—	(10,649)
Income tax benefit related to exercise of stock options	—	8,959	—	—	—	8,959	—	8,959
Other	—	(1,161)	—	—	—	(1,161)	—	(1,161)
Balance, December 31, 2014	$ 1,796	$1,739,700	$(306,330)	$ 266,642	$ (11,047)	$ 1,690,761	$ —	$ 1,690,761
Net income (loss)	—	—	—	92,181	—	92,181	(7,722)	84,459
Other comprehensive income (loss), net of tax	—	—	—	—	(1,599)	(1,599)	(25)	(1,624)
Contribution from noncontrolling interest	—	—	—	—	—	—	54,794	54,794
Compensation under stock award plans	—	64,218	—	—	—	64,218	—	64,218
Issuance of common stock and other	(6)	(30,572)	—	—	—	(30,578)	—	(30,578)
Repurchase of common stock, net of issuances	—	—	(24,999)	—	—	(24,999)	—	(24,999)
Income tax benefit related to exercise of stock options	—	3,930	—	—	—	3,930	—	3,930
Balance, December 31, 2015	$ 1,790	$1,777,276	$(331,329)	$ 358,823	$ (12,646)	$ 1,793,914	$ 47,047	$ 1,840,961

See accompanying notes to the consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Note 1. Organization and Basis of Presentation

On January 4, 2016, ARRIS Group, Inc. ("ARRIS Group") completed its combination (the "Combination") with Pace plc, a company incorporated in England and Wales ("Pace"). In connection with the Combination, (i) ARRIS International plc (the "Registrant"), a company incorporated in England and Wales, acquired all of the outstanding ordinary shares of Pace (the "Pace Acquisition") and (ii) a wholly-owned subsidiary of the Registrant was merged with and into ARRIS Group (the "Merger"), with ARRIS Group surviving the Merger as an indirect wholly-owned subsidiary of the Registrant. Under the terms of the Combination, (a) Pace shareholders received 132.5 pence in cash and 0.1455 ordinary shares of the Registrant for each Pace Share they held, and (b) ARRIS Group stockholders received one ordinary share of the Registrant for each share of ARRIS Group common stock they held. Following the Combination, ARRIS Group became an indirect wholly-owned subsidiary of the Registrant and Pace became a direct wholly-owned subsidiary of the Registrant. The ordinary shares of the Registrant trade on the NASDAQ under the symbol "ARRS."

This Annual Report on Form 10-K is being filed by the Registrant on behalf of, and as successor, to ARRIS Group. The Registrant is deemed to be the successor to ARRIS Group pursuant to Rule 12g-3(a) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the ordinary shares of the Registrant are deemed to be registered under Section 12(b) of the Exchange Act. In accordance with Rule 12g-3(g) under the Exchange Act, this Annual Report on Form 10-K covers the last full fiscal year of ARRIS Group and generally contains information that would be required if filed by ARRIS Group. Historical financial results presented herein are those of ARRIS Group only and do not reflect any results of Pace.

ARRIS Group, Inc. (together with its consolidated subsidiaries and consolidated venture, except as the context otherwise indicates, "ARRIS" or the "Company") is a global media entertainment and data communications solutions provider, headquartered in Suwanee, Georgia. The Company operates in two business segments, Customer Premises Equipment and Network & Cloud (See Note 10 *Segment Information* of Notes to the Consolidated Financial Statements for additional details.), specializing in enabling service providers including cable, telephone, and digital broadcast satellite operators and media programmers to deliver media, voice, and IP data services to their subscribers. ARRIS is a leader in set-tops, digital video and Internet Protocol Television distribution systems, broadband access infrastructure platforms, and associated data and voice Customer Premises Equipment. The Company's solutions are complemented by a broad array of services including technical support, repair and refurbishment, and systems design and integration.

Note 2. Summary of Significant Accounting Policies

(a) Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned foreign and domestic subsidiaries and consolidated venture in which the Company owns more than 50% of the outstanding voting shares of the entity. Intercompany accounts and transactions have been eliminated in consolidation. The consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States (U.S. GAAP), and our reporting currency is the United States Dollar (USD).

(b) Use of Estimates

The preparation of the consolidated financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

(c) Reclassifications

Certain prior year amounts in the financial statements and notes have been reclassified to conform to the fiscal year 2015 presentation.

(d) Cash, Cash Equivalents, and Investments

ARRIS's cash and cash equivalents (which are highly-liquid investments with an original maturity of three months or less) are primarily held in demand deposit accounts and money market accounts. The Company holds investments consisting of mutual funds and debt securities classified as available-for-sale, which are stated at estimated fair value. The debt securities consist primarily of commercial paper, certificates of deposits, short term corporate obligations and U.S. government agency financial instruments. These investments are on deposit with major financial institutions.

The Company accounts for investments in companies in which it has significant influence, or ownership between 20% and 50% of the investee under the equity method of accounting. Under the equity method, the investment is originally recorded at cost and adjusted to recognize the Company's share of net earnings or losses, any basis difference of the investee, and dividends received.

Investments in which we do not exercise significant influence (generally less than a 20 percent ownership interest) are accounted for under the cost method.

The Company evaluates its investments for impairment whenever events or changes in circumstances indicate that the carrying amount of such investments may not be recoverable. An investment is written down to fair value if there is evidence of a loss in value which is other than temporary.

(e) Accounts Receivable and Allowance for Doubtful Accounts and Sales Returns

Accounts receivable are stated at amounts owed by the customers, net of allowance for doubtful accounts, sales returns and allowances. ARRIS establishes a reserve for doubtful accounts based upon the historical experience and leading market indicators in collecting accounts receivable. A majority of the accounts receivable are from a few large cable system operators and telecommunication companies, either with investment rated debt outstanding or with substantial financial resources, and have favorable payment histories. If ARRIS was to have a collection problem with one of its major customers, it is possible the reserve will not be sufficient. ARRIS calculates the reserve for uncollectible accounts using a model that considers customer payment history, recent customer press releases, bankruptcy filings, if any, Dun & Bradstreet reports, and financial statement reviews. The calculation is reviewed by management to assess whether there needs to be an adjustment to the reserve for uncollectible accounts. The reserve is established through a charge to the provision and represents amounts of current and past due customer receivable balances of which management deems a loss to be both probable and estimable. Accounts receivable are charged to the allowance when determined to be no longer collectible.

ARRIS also establishes a reserve for sales returns and allowances. The reserve is an estimate of the impact of potential returns based upon historic trends.

The following table represents a summary of the changes in the reserve for allowance for doubtful accounts, and sales returns and allowances for fiscal 2015, 2014 and 2013 (in thousands):

	2015	2014	2013
Balance at beginning of fiscal year	$6,392	$1,887	$1,630
Charges to expenses	2,997	5,336	257
Reclassification (deductions)	586	(831)	—
Balance at end of fiscal year	$9,975	$6,392	$1,887

(f) Inventories

Inventories are stated at the lower of cost market. Inventory cost is determined on a first-in, first-out basis. The cost of work-in-process and finished goods is comprised of material, labor, and overhead.

(g) Revenue recognition

ARRIS generates revenue as a result of varying activities, including the delivery of stand-alone equipment, custom design and installation services, and bundled sales arrangements inclusive of equipment, software and services. The revenue from these activities is recognized in accordance with applicable accounting guidance and their related interpretations.

Revenue is recognized when all of the following criteria have been met:

- *When persuasive evidence of an arrangement exists*. Contracts and customer purchase orders are used to determine the existence of an arrangement. For professional services evidence that an agreement exists includes information documenting the scope of work to be performed, price, and customer acceptance. These are contained in the signed contract, purchase order, or other documentation that shows scope, price and customer acceptance.
- *Delivery has occurred*. Shipping documents, proof of delivery and customer acceptance (when applicable) are used to verify delivery.
- *The fee is fixed or determinable*. Pricing is considered fixed or determinable at the execution of a customer arrangement, based on specific products and quantities to be delivered at specific prices. This determination includes a review of the payment terms associated with the transaction and whether the sales price is subject to refund or adjustment or future discounts.
- *Collectability is reasonably assured*. The Company assesses the ability to collect from customers based on a number of factors that include information supplied by credit agencies, analyzing customer accounts, reviewing payment history and consulting bank references. Should a circumstance arise where a customer is deemed not creditworthy, all revenue related to the transaction will be deferred until such time that payment is received and all other criteria to allow the Company to recognize revenue have been met.

Revenue is deferred if any of the above revenue recognition criteria is not met as well as when certain circumstances exist for any of our products or services, including, but not limited to:

- When undelivered products or services that are essential to the functionality of the delivered product exist, revenue is deferred until such undelivered products or services are delivered as the customer would not have full use of the delivered elements.
- When required acceptance has not occurred.
- When trade-in rights are granted at the time of sale, that portion of the sale is deferred until the trade-in right is exercised or the right expires. In determining the deferral amount, management estimates the expected trade-in rate and future value of the product upon trade-in. These factors are periodically reviewed and updated by management, and the updates may result in either an increase or decrease in the deferral.

Equipment — The Company provides operators with equipment that can be placed within various stages of a broadband system that allows for the delivery of telephony, video and high-speed data as well as outside plant construction and maintenance equipment. For equipment sales, revenue recognition is generally established when the products have been shipped, risk of loss has transferred, objective evidence exists that the product has been accepted, and no significant obligations remain relative to the transaction. Additionally, based on historical experience, ARRIS has established reliable estimates related to sales returns and other allowances for discounts. These estimates are recorded as a reduction to revenue at the time the revenue is initially recorded.

Multiple Element Arrangements — Certain customer transactions may include multiple deliverables based on the bundling of equipment, software and services. When a multiple element arrangement exists, the fee from the arrangement is allocated to the various deliverables, to the extent appropriate, so that the proper amount can be recognized as revenue as each element is delivered. Based on the composition of the arrangement, the Company analyzes the provisions of the accounting guidance to determine the appropriate model that is applied towards accounting for the multiple element arrangement. If the arrangement includes a combination of elements that fall within different applicable guidance, ARRIS follows the provisions of the hierarchal literature to separate those elements from each other and apply the relevant guidance to each.

To determine the estimated selling price in multiple-element arrangements, the Company first looks to establish vendor specific objective evidence ("VSOE") of the selling price using the prices charged for a deliverable when sold separately. If VSOE of the selling price cannot be established for a deliverable, the Company looks to establish third-party evidence ("TPE") of the selling price by evaluating the pricing of similar and interchangeable competitor products or services in stand-alone arrangements. However, as ARRIS's products typically contain a significant element of proprietary technology and may offer substantially different features and functionality from its competitors, ARRIS has been unable to obtain comparable pricing information with respect to its competitors' products. Therefore, the Company has not been able to obtain reliable evidence of TPE of the selling price. If neither VSOE nor TPE of the selling price can be established for a deliverable, the Company establishes best estimate selling price ("BESP") by reviewing historical transaction information and considering several other internal factors, including discounting and margin objectives. The Company regularly reviews estimated selling price of the product offerings and maintain internal controls over the establishment and updates of these estimates.

ARRIS's equipment deliverables typically include proprietary operating system software, which together deliver the essential functionality of its products. Therefore, ARRIS's equipment are considered non-software elements and are not subject to industry-specific software revenue recognition guidance. For equipment, revenue recognition is generally established when the products have been shipped, risk of loss has transferred, objective evidence exists that the product has been accepted, and no significant obligations remain relative to the transaction.

For arrangements that fall within the software revenue recognition guidance, the fee is allocated to the various elements based on VSOE of fair value. If sufficient VSOE of fair value does not exist for the allocation of revenue to all the various elements in a multiple element arrangement, all revenue from the arrangement is deferred until the earlier of the point at which such sufficient VSOE of fair value is established or all elements within the arrangement are delivered. If VSOE of fair value exists for all undelivered elements, but does not exist for one or more delivered elements, the arrangement consideration is allocated to the various elements of the arrangement using the residual method of accounting. Under the residual method, the amount of the arrangement consideration allocated to the delivered elements is equal to the total arrangement consideration less the aggregate fair value of the undelivered elements. Using this method, any potential discount on the arrangement is allocated entirely to the delivered elements, which ensures that the amount of revenue recognized at any point in time is not overstated. Under the residual method, if VSOE of fair value exists for the undelivered element, generally PCS, the fair value of the undelivered element is deferred and recognized ratably over the term of the PCS contract, and the remaining portion of the arrangement is recognized as revenue upon delivery, which generally occurs upon delivery of the product or implementation of the system. Many of ARRIS's products are sold in combination with customer support and maintenance services, which consist of software updates and product support. Software updates provide customers with rights to unspecified software updates that ARRIS chooses to develop and to maintenance releases and patches that the Company chooses to release during the period of the support period. Product support services include telephone support, remote diagnostics, email and web access, access to on-site technical support personnel and repair or replacement of hardware in the event of damage or failure during the term of the support period. Maintenance and support service fees are recognized ratably under the straight-line method over the term of the contract, which is generally one year. The Company does not record receivables associated with maintenance revenues without a firm, non-cancelable order from the customer. VSOE of fair value is determined based on the price charged when the same element is sold separately and based on the prices at which our customers have renewed their customer support and maintenance. For elements that are not yet being sold separately, the price established by management, if it is probable that the price, once established, will not change before the separate introduction of the element into the marketplace is used to measure VSOE of fair value for that element.

Software Sold Without Tangible Equipment — While not significant, ARRIS does sell internally developed software as well as software developed by outside third parties that does not require significant production, modification or customization. For arrangements that contain only software and the related post-contract support, the Company recognizes revenue in accordance with the applicable software revenue recognition guidance. If the arrangement includes multiple elements that are software only, then the software revenue recognition guidance is applied and the fee is allocated to the various elements based on vendor-specific objective evidence ("VSOE") of fair value. If sufficient VSOE of fair value does not exist for the allocation of revenue to all the various elements in a multiple element software arrangement, all revenue from the arrangement is deferred until the earlier of the point at which such sufficient VSOE of fair value is established or all elements within the arrangement are delivered. If VSOE of fair value exists for all undelivered elements, but does not exist for one or more delivered elements, the arrangement consideration is allocated to the various elements of the arrangement using the residual method of accounting. Under the residual method, the amount of the arrangement consideration allocated to the delivered elements is equal to the total arrangement consideration less the aggregate fair value of the undelivered elements. Under the residual method, if VSOE of fair value exists for the undelivered element, generally post contract support ("PCS"), the fair value of the undelivered element is deferred and recognized ratably over the term of the PCS contract, and the remaining portion of the arrangement is recognized as revenue upon delivery. If sufficient VSOE of fair value does not exist for PCS, revenue for the arrangement is recognized ratably over the term of support.

Standalone Services — Installation, training, and professional services are generally recognized in service revenue when performed or upon completion of the service when the final act is significant in relation to the overall service transaction. The key element for Professional Services in determining when service transaction revenue has been earned is determining the pattern of delivery or performance which determines the extent to which the earnings process is complete and the extent to which customers have received value from services provided. The delivery or performance conditions of our service transactions are typically evaluated under the proportional performance or completed performance model.

Incentives — Customer incentive programs that include consideration, primarily rebates/credits to be used against future product purchases and certain volume discounts, are recorded as a reduction of revenue when the shipment of the requisite equipment occurs.

Value Added Resellers — ARRIS typically employs the sell-in method of accounting for revenue when using a Value Added Reseller ("VAR") as our channel to market. Because product returns are restricted, revenue under this method is generally recognized at the time of shipment to the VAR provided all criteria for recognition are met. There are occasions, based on facts and circumstances surrounding the VAR transaction, where ARRIS will employ the sell-through method of recognizing revenue and defer that revenue until payment occurs.

Retail — Some of ARRIS product is sold through retail channels, which may include provisions involving a right of return. Upon shipment of the product, the Company reduces revenue for an estimate of potential future product returns related to the current period product revenue. Management analyzes historical returns, channel inventory levels, and current economic trends related to the Company's products when evaluating the adequacy of the allowance for sales returns. When applicable, revenue on shipments is reduced for estimated price protection and sales incentives that are deemed to be contra-revenue under the authoritative guidance for revenue recognition.

(h) Shipping and Handling Fees

Shipping and handling costs for the years ended December 31, 2015, 2014, and 2013 were approximately $5.6 million, $6.9 million and $4.9 million, respectively, and are classified in net sales and cost of sales.

(i) Taxes Collected from Customers and Remitted to Governmental Authorities

Taxes assessed by a government authority that are both imposed on and concurrent with specific revenue transactions between us and our customers are presented on a net basis in our Consolidated Statements of Operations.

(j) Depreciation of Property, Plant and Equipment

The Company provides for depreciation of property, plant and equipment on the straight-line basis over estimated useful lives of 10 to 40 years for buildings and improvements, 2 to 10 years for machinery and equipment, and the shorter of the term of the lease or useful life for leasehold improvements. Included in depreciation expense is the amortization of landlord funded tenant improvements which amounted to \$4.5 million in 2015, \$4.0 million in 2014 and \$2.5 million in 2013. Depreciation expense, including amortization of capital leases, for the years ended December 31, 2015, 2014, and 2013 was approximately \$71.8 million, \$79.0 million, and \$61.5 million, respectively.

Certain events or changes in circumstances may indicate that the recoverability of the carrying amount of property, plant and equipment should be assessed, including, among others, a significant decrease in market value, a significant change in the business climate in a particular market, or a current period operating or cash flow loss combined with historical losses or projected future losses. To test for recovery, we group assets (an "asset group") in a manner that represents the lowest level for which identifiable cash flows are largely independent of the cash flows of other groups of assets and liabilities. When such events or changes in circumstances are present, we estimate the future cash flows expected to result from the use of the asset or asset group and its eventual disposition. These estimated future cash flows are consistent with those we use in our internal planning. If the sum of the expected future cash flows (undiscounted and pre-tax based upon policy decision) is less than the carrying amount, we recognize an impairment loss. The impairment loss recognized is the amount by which the carrying amount exceeds the fair value. We use a variety of methodologies to determine the fair value of property, plant and equipment, including appraisals and discounted cash flow models, which are consistent with the assumptions we believe hypothetical marketplace participants would use. See Note 13 *Property, Plant and Equipment* of Notes to the Consolidated Financial Statements for further information property, plant and equipment.

(k) Goodwill, and Other Intangible Assets

We classify intangible assets into three categories: (1) intangible assets with definite lives subject to amortization, (2) intangible assets with indefinite lives not subject to amortization and (3) goodwill. We determine the useful lives of our identifiable intangible assets after considering the specific facts and circumstances related to each intangible asset. Factors we consider when determining useful lives include the contractual term of any agreement related to the asset, the historical performance of the asset, the Company's long-term strategy for using the asset, any laws or other local regulations which could impact the useful life of the asset, and other economic factors, including competition and specific market conditions. Intangible assets that are deemed to have definite lives are amortized, primarily on a straight-line basis, over their useful lives, generally ranging from 1 to 13 years. See Note 5 *Goodwill and Other Intangible Assets* of Notes to the Consolidated Financial Statements for further information on goodwill and other intangible assets.

Other Intangible Assets

When facts and circumstances indicate that the carrying value of definite-lived intangible assets may not be recoverable, management assesses the recoverability of the carrying value by preparing estimates of sales volume and the resulting profit and cash flows. These estimated future cash flows are consistent with those we use in our internal planning. To test for recovery, we group assets (an "asset group") in a manner that represents the lowest level for which identifiable cash flows are largely independent of the cash flows of other groups of assets and liabilities. If the sum of the expected future cash flows (undiscounted and pre-tax based upon policy decision) is less than the carrying amount, we recognize an impairment loss. The impairment loss recognized is the amount by which the carrying amount of the asset or asset group exceeds the fair value. We use a variety of methodologies to determine the fair value of these assets, including discounted cash flow models, which are consistent with the assumptions we believe hypothetical marketplace participants would use.

We test intangible assets determined to have indefinite useful lives, including certain trademarks, in-process research and development and goodwill, for impairment annually, or more frequently if events or circumstances indicate that assets might be impaired. Our Company performs these annual impairment reviews as of the first day of our fourth fiscal quarter (October 1). We use a variety of methodologies in conducting impairment assessments of indefinite-lived intangible assets, including, but not limited to, discounted cash flow models, which are based on the assumptions we believe hypothetical marketplace participants would use. For indefinite-lived intangible assets, other than goodwill, if the carrying amount exceeds the fair value, an impairment charge is recognized in an amount equal to that excess. Acquired in-process research and development assets are initially recognized and measured at fair value and classified as indefinite-lived assets until the successful completion or abandonment of the associated research and development efforts. Accordingly, during the development period after acquisition, this asset is not amortized as charges to earnings. Completion of the associated research and development efforts cause the indefinite-lived in-process research and development assets to become a finite-lived asset. As such, prior to commencing amortization the assets is tested for impairment.

The Company has the option to perform a qualitative assessment of indefinite-lived intangible assets, other than goodwill, prior to completing the impairment test described above. The Company must assess whether it is more likely than not that the fair value of the intangible asset is less than its carrying amount. If the Company concludes that this is the case, it must perform the testing described above. Otherwise, the Company does not need to perform any further assessment.

There were no impairment charges related to intangible assets (definite-lived and indefinite-lived other than goodwill), during 2015, 2014 and 2013.

Goodwill

We perform impairment tests of goodwill at our reporting unit level, which is at or one level below our operating segments. Our operating segments are primarily based on the nature of the products and services offered, which is consistent with the way management runs our business. Our Customer Premises Equipment operating segment is the same as the reporting unit. Our Network & Cloud operating segment is subdivided into three reporting units which are Network Infrastructure, Cloud Services, and Cloud TV. Goodwill is assigned to the reporting unit or units that benefit from the synergies arising from each business combination.

The goodwill impairment test consists of a two-step process, if necessary. The first step is to compare the fair value of a reporting unit to its carrying value, including goodwill. We typically use a weighting of income approach using discounted cash flow models and a market approach to determine the fair value of a reporting unit. The assumptions used in these models are consistent with those we believe hypothetical marketplace participants would use. If the fair value of the reporting unit is less than its carrying value, the second step of the impairment test must be performed in order to determine the amount of impairment loss, if any. The second step compares the implied fair value of the reporting unit’s goodwill with the carrying amount of that goodwill. If the carrying amount of the reporting unit’s goodwill exceeds its implied fair value, an impairment charge is recognized in an amount equal to that excess. The loss recognized cannot exceed the carrying amount of goodwill.

The Company has the option to perform a qualitative assessment of goodwill prior to completing the two-step process described above to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill and other intangible assets. If the Company concludes that this is the case, it must perform the two-step process. Otherwise, the Company will forego the two-step process and does not need to perform any further testing.

There was no impairment of goodwill resulting from our annual impairment testing in 2015, 2014 and 2013.

(l) Advertising and Sales Promotion

Advertising and sales promotion costs are expensed as incurred. Advertising expense was approximately $16.8 million, $8.2 million, and $4.1 million for the years ended December 31, 2015, 2014 and 2013, respectively.

(m) Research and Development

Research and development (“R&D”) costs are expensed as incurred. The expenditures include compensation costs, materials, other direct expenses, and an allocation of information technology, telecommunications, and facilities costs.

(n) Warranty

ARRIS provides warranties of various lengths to customers based on the specific product and the terms of individual agreements. For further discussion, see Note 9 *Guarantees* of the Notes to the Consolidated Financial Statements, Guarantees for further discussion.

(o) Income Taxes

ARRIS uses the liability method of accounting for income taxes, which requires recognition of temporary differences between financial statement and income tax bases of assets and liabilities, measured by enacted tax rates.

If necessary, the measurement of deferred tax assets is reduced by a valuation allowance to the amount that is more-likely-than-not to be realized based on available evidence. ARRIS reports a liability for unrecognized tax benefits resulting from uncertain tax positions taken or expected to be taken in a tax return. The Company recognizes interest and penalties, if any, related to unrecognized tax benefits in income tax expense. See Note 16 *Income Taxes* of Notes to the Consolidated Financial Statements for further discussion.

(p) Foreign Currency Translation

A significant portion of the Company's products are manufactured or assembled in China, Mexico and Taiwan, and we have research and development centers in Argentina, China, India, Ireland, Israel and Sweden. Sales into international markets have been and are expected in the future to be an important part of the Company's business. These foreign operations are subject to the usual risks inherent in conducting business abroad, including risks with respect to currency exchange rates, economic and political destabilization, restrictive actions and taxation by foreign governments, nationalization, the laws and policies of the United States affecting trade, foreign investment and loans, and foreign tax laws.

ARRIS has certain international customers who are billed in their local currency and certain international operations that procure in U.S. dollars. ARRIS also has certain predictable expenditures for international operations in local currency. Additionally, certain intercompany transactions are denominated in foreign currencies and subject to revaluation. The Company enters into forward or currency option contracts based on a percentage of expected foreign currency exposures. The percentage can vary, based on the predictability of the exposures denominated in the foreign currency. See Note 8 *Derivative Instruments and Hedging Activities* of Notes to the Consolidated Financial Statements for further discussion.

(q) Stock-Based Compensation

See Note 17 Stock-Based Compensation of Notes to the Consolidated Financial Statements for further discussion of the Company's significant accounting policies related to stock based compensation.

(r) Concentrations of Credit Risk

Financial instruments that potentially subject ARRIS to concentrations of credit risk consist principally of cash, cash equivalents and short-term investments, accounts receivable and derivatives. ARRIS places its temporary cash investments with high credit quality financial institutions. Concentrations with respect to accounts receivable occur as the Company sells primarily to large, well-established companies including companies outside of the United States. The Company's credit policy generally does not require collateral from its customers. ARRIS closely monitors extensions of credit to other parties and, where necessary, utilizes common financial instruments to mitigate risk or requires cash on delivery terms. Overall financial strategies and the effect of using a hedge are reviewed periodically.

(s) Fair Value

The following methods and assumptions were used by the Company in estimating its fair value disclosures for financial instruments:

- Cash, cash equivalents, and short-term investments: The carrying amounts reported in the consolidated balance sheets for cash, cash equivalents, and short-term investments approximate their fair values.
- Accounts receivable and accounts payable: The carrying amounts reported in the balance sheet for accounts receivable and accounts payable approximate their fair values.
- Marketable securities: The fair values for trading and available-for-sale equity securities are based on quoted market prices or observable prices based on inputs not in active markets but corroborated by market data.
- Non-marketable securities: Non-marketable equity securities are subject to a periodic impairment review; however, there are no open-market valuations, and the impairment analysis requires significant judgment. This analysis includes assessment of the investee's financial condition, the business outlook for its products and technology, its projected results and cash flow, recent rounds of financing, and the likelihood of obtaining subsequent rounds of financing.
- Senior secured credit facilities: Comprised of term loans and revolving credit facility of which the outstanding principal amount approximates fair value.
- Derivative instruments: The carrying amounts reported in the balance sheet for derivative financial instruments approximate their fair values. The Company has designated interest rate derivatives as cash flow hedges and the objective is to manage the variability of cash flows in the interest payments related to the portion of the variable-rate debt designated as being hedged. The Company's foreign currency derivative instruments economically hedge certain risk but are not designated as hedges. The objective of these derivatives instruments is to add stability to foreign currency gains and losses recorded as other expense (income) and to manage its exposure to foreign currency movements.

(t) Computer Software

Internal-use software

The Company capitalizes costs associated with internally developed and/or purchased software systems for internal use that have reached the application development stage and meet recoverability tests. Capitalized costs include external direct costs of materials and services utilized in developing or obtaining internal-use software and payroll and payroll-related expenses for employees who are directly associated with and devote time to the internal-use software project. Capitalization of such costs begins when the preliminary project stage is complete and ceases no later than the point at which the project is substantially complete and ready for its intended purpose. These capitalized costs are amortized on a straight-line basis over periods of two to seven years, beginning when the asset is ready for its intended use. Capitalized costs are included in property, plant, and equipment on the consolidated balance sheets.

External-use software

Research and development costs are charged to expense as incurred. ARRIS generally has not capitalized any such development costs because the costs incurred between the attainment of technological feasibility for the related software product through the date when the product is available for general release to customers has been insignificant.

(u) Comprehensive Income (Loss)

The components of comprehensive income (loss) include net income (loss), unrealized gains (losses) on available-for-sale securities, unrealized gains (losses) on derivative instruments, change in unfunded pension liability, net of tax, if applicable and change in cumulative translation adjustments.

Note 3. Impact of Recently Issued Accounting Standards

Adoption of new accounting standards — In April 2014, the Financial Accounting Standards Board ("FASB") issued an accounting standard update that changes the requirements for reporting discontinued operations. A discontinued operation may include a component of an entity or a group of components of an entity. A disposal of a component of an entity or a group of components of an entity is required to be reported in discontinued operations if the disposal represents a strategic shift that has (or will have) a major effect on an entity's operations and financial results and when the component or group of components meets the criteria to be classified as held for sale, is disposed of by sale or is disposed of by other than by sale. ARRIS adopted this standard prospectively on January 1, 2015. The adoption of this guidance did not have a material impact on the Company's consolidated financial position and results of operations.

In April 2015, the FASB issued new guidance, which requires the cost of issuing debt to no longer be recorded as a separate asset but rather to be presented on the balance sheet as a direct reduction to the carrying value of the related debt liability, similar to the presentation of debt discounts. This guidance is effective for interim and annual periods beginning after December 15, 2015 including retrospective conforming presentation of prior periods presented. Early adoption of the standard is permitted. We early adopted the standard as of December 31, 2015. As a result of the retrospective adoption, we reclassified unamortized debt issuance costs of $25.3 million as of December 30, 2014 from other current assets and other assets to current and long-term debt on our Consolidated Balance Sheets. Adoption of this standard did not impact our results of operations or cash flows in the current or previous annual reporting periods.

In September 2015, the FASB issued updated guidance related to the simplification of the accounting for measurement-period adjustments in business combinations. This standard update eliminates the requirement to account for measurement-period adjustments retrospectively. This standard update instead requires an acquirer to recognize the measurement-period adjustments in the reporting period in which the adjustments are determined. This standard update also requires that an acquirer record the effects on earnings of any changes resulting from the change in provisional amounts, calculated as if the accounting had been completed at the acquisition date. The Company adopted this standard during the fourth quarter of 2015. The adoption of this standard did not have a material impact on our consolidated financial position and results of operations.

On November 20, 2015, the Financial Accounting Standards Board issued new guidance, Balance Sheet Classification of Deferred Taxes, requiring all deferred tax assets and liabilities, and any related valuation allowance, to be classified as noncurrent on the balance sheet. The classification change for all deferred taxes as noncurrent eliminates the need to separately identify the net current and net noncurrent deferred tax asset or liability in each jurisdiction and allocate valuation allowances. The Company elected to prospectively adopt the accounting standard in the beginning of our fourth quarter of fiscal 2015. Prior periods in our Consolidated Financial Statements were not retrospectively adjusted.

Accounting standards issued but not yet effective — In May 2014, the FASB issued an accounting standard update, Revenue from Contracts with Customers. The standard requires an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The new guidance is effective for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period. Early adoption is not permitted. It can be adopted either retrospectively to each prior reporting period presented or as a cumulative effect adjustment as of the date of adoption. The Company is currently assessing the potential impact of this update on its consolidated financial statements. In August 2015, the FASB delayed the effective date of this standard by one year to reporting periods beginning after December 15, 2017, but permit companies the option to adopt the standard one year earlier (that is, as of the original effective date).

In June 2014, the FASB issued an update to its accounting guidance related to share-based compensation. The guidance requires that a performance target that affects vesting and that could be achieved after the requisite service period, be treated as a performance condition, and therefore shall not be reflected in determining the fair value of the award at the grant date. This update further clarifies that compensation cost should be recognized in the period in which it becomes probable that the performance target will be achieved and should represent the compensation cost attributable to the period(s) for which the requisite service has already been rendered. The guidance will be effective for annual and interim periods beginning after December 15, 2015 and is not expected to have a material effect on the Company's consolidated financial position and results of operations.

In August 2014, the FASB issued new guidance related to the disclosures around going concern. The new standard provides guidance around management's responsibility to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about an entity's ability to continue as a going concern, and if those conditions exist to provide related footnote disclosures. The new standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2016. Early adoption is permitted. The adoption of this standard is not expected to have a material impact on the Company's consolidated financial statements.

In January 2015, the FASB issued new guidance simplifying income statement presentation by eliminating the concept of "extraordinary items". This guidance eliminates from U.S. GAAP the concept of extraordinary items. The new standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2015. A reporting entity may apply the amendments prospectively. We do not anticipate that this guidance will materially impact our consolidated financial statements.

In February 2015, the FASB issued new guidance related to consolidations. The new guidance amends certain requirements for determining whether a variable interest entity must be consolidated. The amendments are effective for public business entities for fiscal years, and for interim periods within those fiscal years, beginning after December 15, 2015. The adoption of the new guidance is not expected to have a material impact on the Company's consolidated financial statements.

In April 2015, the FASB issued new guidance, in determining whether fees for purchasing cloud computing services (or hosted software solutions) are considered internal-use software or should be considered a service contract. A cloud computing agreement that includes a software license should be accounted for in the same manner as internal-use software if the customer has contractual right to take possession of the software during the hosting period without significant penalty and it is feasible to either run the software on the customer's hardware or contract with another vendor to host the software. Arrangements that don't meet the requirements for internal-use software should be accounted for as a service contract. This guidance will be effective for interim and annual periods beginning after December 15, 2015. Early adoption of the standard is permitted. The adoption of this standard is not expected to have a material impact on the Company's consolidated financial statements.

In July 2015, the FASB issued updated guidance related to the simplification of the measurement of inventory. This standard update does not apply to inventory that is measured using last-in, first-out or the retail inventory method. This standard update applies to all other inventory, which includes inventory that is measured using first-in, first-out or average cost methods. The standard update requires entities to measure inventory at the lower of cost and net realizable value. Net realizable value is defined as the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. This standard update is effective for fiscal years beginning after December 15, 2015. Early adoption is permitted. The adoption of this standard update is not expected to have a material impact on our condensed consolidated financial statements.

Note 4. Business Acquisitions

Acquisition of ActiveVideo

In April 2015, the Company and Charter Communications Inc. formed a venture, A-C Acquisition, LLC ("A-C Venture") with ARRIS's and Charter's ownership percentage of the venture being 65% and 35%, respectively. On April 30, 2015, A-C Venture acquired 100% of the outstanding shares in ActiveVideo Networks, Inc. ("ActiveVideo"). The consideration for the acquisition was $98 million in cash. ActiveVideo, headquartered in San Jose, California, is a software company that uses cloud-based technology to bring advanced user interfaces and services to cable and IPTV set-top boxes, as well as connected consumer electronic devices. Goodwill arising from the acquisition is attributable to the workforce of the acquired business, future technology, future customer relationships, and strategic opportunities that are expected to arise from the acquisition. No tax deductible goodwill existed as of the acquisition date. Subsequent to the acquisition date, ActiveVideo converted to a limited liability company creating tax basis in goodwill essentially equal to its book basis. The total goodwill was assigned to the Company's Cloud TV reporting unit, within the Company's N&C reportable segment.

The results of operations of ActiveVideo have been included in the Company's Consolidated Financial Statements as of and from the date of acquisition.

The following table summarizes the estimated fair value of the net assets acquired and the liabilities assumed at the acquisition dates (in thousands):

	April 30, 2015
Consideration transferred (net of cash acquired of $523)	$ 97,905
Assets acquired and liabilities assumed:	
Current assets	1,984
Property and equipment	1,714
Other assets	68
Identifiable intangible assets	57,700
Debt assumed	(15,000)
Other liabilities assumed	(27,314)
Net identifiable assets acquired	19,152
Goodwill	$ 78,753

The acquired identifiable intangible assets of ActiveVideo as of the date of the acquisition are summarized below (in thousands):

Intangible Asset	Amount	Weighted-Average Useful Life
Customer relationships	$26,200	7 years
Developed technology	25,600	5 years
Trademarks	5,900	Indefinite
	$57,700	

The Company incurred acquisition related costs of $1.1 million in 2015. These amounts were expensed as incurred and are included in the Consolidated Statement of Operations in the line item titled "Integration, acquisition, restructuring and other costs".

As of the acquisition date, total equity contributed by the noncontrolling interest was $54 million, reflecting its proportionate 35% share of the acquisition consideration of $34 million, payment of assumed liabilities of $13 million and additional working capital funding of $7 million.

The accounting for the business combination is complete at the end of the reporting period.

Acquisition of Motorola Home

On April 17, 2013, ARRIS completed its acquisition of Motorola Home from General Instrument Holdings, Inc., a subsidiary of Google, Inc. Consideration for the acquisition consisted of approximately $2,208.1 million in cash, inclusive of working capital adjustments, and 10.6 million shares of ARRIS's stock (the "Acquisition").

The Acquisition enhanced the Company's scale and product breadth in the telecom industry, significantly diversified the Company's customer base and expanded dramatically the Company's international presence. Notably, the acquisition brought to ARRIS, Motorola Home's product scale and scope in end-to-end video processing and delivery, including a full range of QAM and IP set-tops products, as well as IP Gateway CPE equipment for data and voice services for broadband service providers. The Acquisition also enhanced the depth and scale of the Company's R&D capabilities, particularly in the video arena.

Note 5. Goodwill and Intangible Assets

The changes in the carrying amount of goodwill for the three years ended December 31, 2015 are as follows (in thousands):

	CPE	N & C	Total
Goodwill	$ 31,850	$ 540,921	$ 572,771
Accumulated impairment losses	—	(378,656)	(378,656)
Balance as of December 31, 2012	31,850	162,265	194,115
Goodwill acquired	656,808	92,593	749,401
Other	—	(3,114)	(3,114)
Goodwill	688,658	630,400	1,319,058
Accumulated impairment losses	—	(378,656)	(378,656)
Balance as of December 31, 2013	688,658	251,744	940,402
Goodwill acquired	—	1,682	1,682
Other	(4,061)	(1,956)	(6,017)
Goodwill	684,597	630,126	1,314,723
Accumulated impairment losses	—	(378,656)	(378,656)
Balance as of December 31, 2014	684,597	251,470	936,067
Goodwill acquired (disposed), net	—	78,053	78,053
Other	(2,015)	1,858	(157)
Goodwill	682,582	710,037	1,392,619
Accumulated impairment losses	—	(378,656)	(378,656)
Balance as of December 31, 2015	$682,582	$ 331,381	$1,013,963

During the 2015, the Company recorded $78.8 million of goodwill related to the ActiveVideo acquisition and disposed of $(0.7) million of goodwill related to the sale of our Supplies business.

Intangible Assets

The gross carrying amount and accumulated amortization of the Company's intangible assets as of December 31, 2015 and December 31, 2014 are as follows (in thousands):

	December 31, 2015			December 31, 2014		
	Gross Amount	Accumulated Amortization	Net Book Value	Gross Amount	Accumulated Amortization	Net Book Value
Definite-lived intangible assets :						
Customer relationships (2)	$ 930,212	$ 468,414	$461,798	$ 904,012	$ 366,452	$537,560
Developed technology, patents & licenses (1,2,3)	704,137	361,719	342,418	632,487	234,882	397,605
Trademarks, trade and domain names	21,072	20,740	332	21,072	17,949	3,123
Sub-total	$1,655,421	$ 850,873	$804,548	$1,562,671	$ 619,283	$943,388
Indefinite-lived intangible assets:						
Trademarks (2)	$ 5,900	—	$ 5,900	$ —	—	$ —
In-process R&D (3)	—	—	—	5,100	—	5,100
Sub-total	$ 5,900	—	$ 5,900	$ 5,100	—	$ 5,100
Total	$1,661,321	$ 850,873	$810,448	$1,562,671	$ 619,283	$943,388

(1) In 2015, the Company recorded intangible assets of $34.3 million for a non-exclusive license to approximately four thousand patents purchased by RPX Corporation ("RPX"), resulting from its agreement to participate in a syndicate of approximately 30 companies, including certain customers of ARRIS, to fund the RPX purchase of patent assets from Rockstar Consortium and its subsidiaries ("Rockstar"). The license assets have a weighted average useful life of nine years at acquisition.

(2) The increase in 2015 reflects intangible assets acquired in the ActiveVideo acquisition. See Note 4 *Business Acquisitions* of Notes to the Consolidated Financial Statements for further information on ActiveVideo intangible assets acquired.

(3) In-process research and development of $5.1 million was reclassified in 2015 to become a definite-lived asset upon completion of the associated research and development efforts.

Amortization expense recorded on the intangible assets for the years ended December 31, 2015, 2014 and 2013 was $231.6 million, $236.8 million, and $193.6 million, respectively. The estimated total amortization expense for finite-lived intangibles for each of the next five fiscal years is as follows (in thousands):

2016	$ 203,778
2017	186,843
2018	136,281
2019	113,732
2020	104,955
Thereafter	58,959

Note 6. Investments

ARRIS's investments consisted of the following (in thousands):

	As of December 31, 2015	As of December 31, 2014
Current Assets:		
Available-for-sale securities	$ 15,470	$ 126,748
Noncurrent Assets:		
Available-for-sale securities	4,036	8,631
Equity method investments	24,452	27,355
Cost method investments	16,646	15,161
Other investments	24,408	26,493
Total classified as non-current assets	69,542	77,640
Total	$ 85,012	$ 204,388

Available-for-sale securities — ARRIS's investments in debt and marketable equity securities are categorized as available-for-sale and are carried at fair value. Realized gains and losses on available-for-sale securities are included in net income. Unrealized gains and losses on available-for-sale securities are included in our Consolidated Balance Sheet as a component of accumulated other comprehensive income (loss). Realized and unrealized gains and losses in total and by individual investment as of December 31, 2015 and 2014 were not material. The amortized cost basis of the Company's investments approximates fair value.

The contractual maturities of the Company's available-for-sale securities as of December 31, 2015 are shown below. Actual maturities may differ from contractual maturities because the issuers of the securities may have the right to prepay obligations without prepayment penalties (in thousands):

	December 31, 2015
Within one year	$ 15,470
After one year through five years	—
After five years through ten years	—
After ten years	4,036
Total	$ 19,506

Equity method investments — ARRIS owns certain investments in limited liability companies and partnerships that are accounted for using the equity method as the Company has significant influence over operating and financial policies of the investee companies. These investments are recorded at $24.5 million and $27.4 as of December 31, 2015 and 2014, respectively.

The following table summarizes the ownership structure and ownership percentage of the non-consolidated investments as of December 31, 2015, accounted for using the equity method.

Name of Investee	Ownership Structure	% Ownership
MPEG LA	Limited Liability Company	8.4%
Music Choice	Limited Liability Partnership	18.2%
Conditional Access Licensing ("CAL")	Limited Liability Company	49.0%
Combined Conditional Access Development ("CCAD")	Limited Liability Company	50.0%

ARRIS owns investments in two limited liability corporations. The investees were determined to be variable interest entities and ARRIS is not the primary beneficiary, as ARRIS does not have the power to direct the activities of the investee that most significantly impact its economic performance. The limited liability corporations are a licensing and a research and development company. The purpose of the limited liability corporations are to develop, deploy, license, support, and to gain market acceptance for certain technologies that reside in a cable plant or in a cable device. Subject to agreement on annual statements of work, the Company is providing to one of the ventures, engineering services per year approximating 20% to 30% of the approved venture budget, which is expected to be in the range of approximately $6 million to $8 million per year. The Company is also required to make annual contributions for the purpose of funding development projects identified by the venture. During 2015, the Company made funding contributions to the investment of $16.0 million.

The following table summarizes the carrying amount and maximum exposure to loss for the investments accounted for using the equity method as of December 31, 2015 (in thousands)

	Carrying Amount	Maximum Exposure to Loss
Conditional Access Licensing	$ 11,238	$ 11,238
Combined Conditional Access Development	2,148	18,000

The Company's future total annual funding contributions to CCAD are expected to be in the range of approximately $16 million to $18 million, and represent the Company's annual maximum exposure to loss.

During the quarter ended December 31, 2015, the Company recorded a gain of $2.5 million resulting from the transfer of certain technology to CCAD. An additional $2.5 million of unrecognized gain is being treated as a basis difference in the investment, and will be recognized over an expected period of four years.

Cost method investments — ARRIS holds cost method investments in certain private companies. Due to the fact the investments are in private companies, the Company is exempt from estimating the fair value on an interim and annual basis. It is impractical to estimate the fair value since the quoted market price is not available.

Furthermore, the cost of obtaining an independent valuation appears excessive considering the materiality of the investments to the Company. However, ARRIS is required to estimate the fair value if there has been an identifiable event or change in circumstance that may have a significant adverse effect on the fair value of the investment.

Other investments — ARRIS holds investments in certain life insurance contracts. The Company determined the fair value to be the amount that could be realized under the insurance contract as of each reporting period. The changes in the fair value of these contracts are included in net income.

Other-Than-Temporary Investment Impairments — In making this determination, ARRIS evaluates its investments for any other-than-temporary impairment on a quarterly basis considering all available evidence, including changes in general market conditions, specific industry and individual entity data, the financial condition and the near-term prospects of the entity issuing the security, and the Company's ability and intent to hold the investment until recovery.

For the year ended December 31, 2015, ARRIS concluded that one private company had indicators of impairment that resulted in other-than-temporary impairment charge of $0.2 million. For the year ended December 31, 2014, the Company concluded that two private companies had indicators of impairment that resulted in other-than-temporary impairment charges of $7.0 million. These charges are reflected in the Consolidated Statements of Operations.

Classification of securities as current or non-current is dependent upon management's intended holding period, the security's maturity date and liquidity consideration based on market conditions. If management intends to hold the securities for longer than one year as of the balance sheet date, they are classified as non-current.

Note 7. Fair Value Measurements

Fair value is based on the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. U.S GAAP establishes a fair value hierarchy that is based on the extent and level of judgment used to estimate the fair value of assets and liabilities. In order to increase consistency and comparability in fair value measurements, the FASB has established a fair value hierarchy that prioritizes observable and unobservable inputs used to measure fair value into three broad levels. An asset or liability's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the measurement of its fair value. The three levels of input defined by U.S. GAAP are as follows:

Level 1: Quoted prices (unadjusted) in active markets that are accessible at the measurement date for assets or liabilities.

Level 2: Observable prices that are based on inputs not quoted on active markets, but corroborated by market data.

Level 3: Unobservable inputs are used when little or no market data is available.

The following table presents the Company's investment assets (excluding equity and cost method investments) and derivatives measured at fair value on a recurring basis as of December 31, 2015 and 2014 (in thousands):

	December 31, 2015			
	Level 1	Level 2	Level 3	Total
Certificates of deposit	$ —	$ 4,208	$ —	$ 4,208
Corporate bonds	—	6,257	—	6,257
Short-term bond fund	5,005	—	—	5,005
Corporate obligations	—	1	—	1
Money markets	209	—	—	209
Mutual funds	131	—	—	131
Other investments	—	3,695	—	3,695
Interest rate derivatives — liability derivatives	—	(10,759)	—	(10,759)
Foreign currency contracts — asset position	—	7,064	—	7,064
Foreign currency contracts — liability position	—	(24,371)	—	(24,371)

	December 31, 2014			
	Level 1	Level 2	Level 3	Total
Certificates of deposit	$ —	$63,171	$ —	$63,171
Commercial paper	—	1,000	—	1,000
Corporate bonds	—	37,737	—	37,737
Short-term bond fund	29,708	—	—	29,708
Corporate obligations	—	46	—	46
Money markets	210	—	—	210
Mutual funds	133	—	—	133
Other investments	—	3,369	—	3,369
Interest rate derivatives — asset derivatives	—	1,416	—	1,416
Interest rate derivatives — liability derivatives	—	(6,414)	—	(6,414)
Foreign currency contracts — asset position	—	2,876	—	2,876
Foreign currency contracts — liability position	—	(201)	—	(201)

All of the Company's short-term and long-term investments at December 31, 2015 are classified within Level 1 or Level 2 of the fair value hierarchy as they are valued using quoted market prices, market prices for similar securities, or alternative pricing sources with reasonable levels of price transparency. The types of instruments valued based on quoted market prices in active markets include the Company's investment in money market funds, mutual funds and municipal bonds. Such instruments are generally classified within Level 1 of the fair value hierarchy. The types of instruments valued based on other observable inputs include corporate obligations and bonds, commercial paper and certificates of deposit. Such instruments are classified within Level 2 of the fair value hierarchy.

In addition to the financial instruments included in the above table, certain nonfinancial assets and liabilities are to be measured at fair value on a nonrecurring basis in accordance with applicable authoritative guidance. This includes items such as nonfinancial assets and liabilities initially measured at fair value in a business combination (but not measured at fair value in subsequent periods) and nonfinancial long-lived asset groups measured at fair value for an impairment assessment. In general, nonfinancial assets including goodwill, other intangible assets and property and equipment are measured at fair value when there is an indication of impairment and are recorded at fair value only when any impairment is recognized. As of December 31, 2015, the Company had not recorded any impairment related to such assets and had no other material nonfinancial assets or liabilities requiring adjustments or write-downs to their current fair value.

The Company believes the principal amount of the debt as of December 31, 2015 approximated the fair value because it bears interest at rates that are adjusted periodically, analysis of recent market conditions, prevailing interest rates, and other Company specific factors. The Company has classified the debt as a Level 2 item within the fair value hierarchy.

Note 8. Derivative Instruments and Hedging Activities

Overview

ARRIS is exposed to financial market risk, primarily related to foreign currency and interest rates. These exposures are actively monitored by management. To manage the volatility relating to certain of these exposures, the Company enters into a variety of derivative financial instruments. Management's objective is to reduce, where it is deemed appropriate to do so, fluctuations in earnings and cash flows associated with changes in foreign currency and interest rates. ARRIS's policies and practices are to use derivative financial instruments only to the extent necessary to manage exposures. ARRIS does not hold or issue derivative financial instruments for trading or speculative purposes.

The Company records all derivatives on the balance sheet at fair value. The accounting for changes in the fair value of derivatives depends on the intended use of the derivative, whether the Company has elected to designate a derivative in a hedging relationship and apply hedge accounting and whether the hedging relationship has satisfied the criteria necessary to apply hedge accounting. Derivatives designated and qualifying as a hedge of the exposure to changes in the fair value of an asset, liability, or firm commitment attributable to a particular risk, such as interest rate risk, are considered fair value hedges. Derivatives designated and qualifying as a hedge of the exposure to variability in expected future cash flows, or other types of forecasted transactions, are considered cash flow hedges. Derivatives also may be designated as hedges of the foreign currency exposure of a net investment in a foreign operation. Hedge accounting generally provides for the matching of the timing of gain or loss recognition on the hedging instrument with the recognition of the changes in the fair value of the hedged asset or liability that are attributable to the hedged risk in a fair value hedge or the earnings effect of the hedged forecasted transactions in a cash flow hedge. The Company may enter into derivative contracts that are intended to economically hedge certain of its risk, even though hedge accounting does not apply or the Company elects not to apply hedge accounting. In accordance with the FASB's fair value measurement guidance, the Company made an accounting policy election to measure the credit risk of its derivative financial instruments that are subject to master netting agreements on a net basis by counterparty portfolio.

Cash flow hedges of interest rate risk

In April 2013, ARRIS entered into senior secured credit facilities having variable interest rates with Bank of America, N.A. and various other institutions, which are comprised of (i) a "Term Loan A Facility" of $1.1 billion, (ii) a "Term Loan B Facility" of $825 million and (iii) a "Revolving Credit Facility" of $250 million. In June 2015, ARRIS amended and restated its existing credit agreement to improve the terms and conditions of the credit agreement, extend the maturities of certain loan facilities, increase the amount of the revolving credit facility, and add a new "Term Loan A-1 Facility" to fund the acquisition of Pace. As a result of this exposure to interest rate movements, ARRIS entered into various interest rate swap arrangements, which effectively converted $625 million of the Company's variable-rate debt based on one-month LIBOR to an aggregate fixed rate of approximately 3.15% as of September 30, 2015. This fixed rate could vary up by 50 basis points or down by 25 basis points based on future changes to the Company's net leverage ratio. $600 million of these swaps matures on December 29, 2017 and $25 million matures on March 31, 2020. Additionally, the Company also entered into six $100 million forward-starting interest rate swap arrangements, which effectively will convert $600 million of the Company's variable-rate debt based on one-month LIBOR to an aggregate fixed rate of 4.03% based on the Company's interest rates as of December 31, 2015. This fixed rate could also vary up by 50 basis points or down by 25 basis points based on future changes to the Company's net leverage ratio. Each of these swaps begins on December 29, 2017 and matures on March 31, 2020. ARRIS has designated these swaps as cash flow hedges, and the objective of these hedges is to manage the variability of cash flows in the interest payments related to the portion of the variable-rate debt designated as being hedged.

The Company's objectives in using interest rate derivatives are to add stability to interest expense and to manage its exposure to interest rate movements. To accomplish this objective, the Company uses interest rate swaps as part of its interest rate risk management strategy. Interest rate swaps designated as cash flow hedges involve the receipt of variable amounts from a counterparty in exchange for the Company making fixed-rate payments over the life of the agreements without exchange of the underlying notional amount.

The effective portion of changes in the fair value of derivatives designated and that qualify as cash flow hedges is recorded in Accumulated Other Comprehensive Income and is subsequently reclassified into earnings in the period that the hedged forecasted transaction affects earnings. During 2015, such derivatives were used to hedge the variable cash flows associated with debt. The ineffective portion of the change in fair value of the derivatives is recognized directly in earnings. During the years ended December 31, 2015 and 2014, the Company did not have expenses related to hedge ineffectiveness in earnings.

Amounts reported in accumulated other comprehensive income related to derivatives will be reclassified to interest expense as interest payments are made on the Company's variable-rate debt. Over the next 12 months, the Company estimates that an additional $4.5 million may be reclassified as an increase to interest expense.

The table below presents the pre-tax impact of the Company's derivative financial instruments had on the Accumulated Other Comprehensive Income and Statement of Operations for the years ended December 31, 2015 and 2014 (in thousands):

	Years Ended December 31, 2015	Years Ended December 31, 2014
Gain (Loss) Recognized in OCI on Derivative (Effective Portion)	$ (13,256)	$ (8,541)
Location of Gain (Loss) Reclassified from Accumulated OCI into Income (Effective Portion)	Interest expense	Interest expense
Amounts Reclassified from Accumulated OCI into Income (Effective Portion)	$ 7,495	$ 7,550

The following table indicates the location on the Consolidated Balance Sheets in which the Company's derivative assets and liabilities designated as hedging instruments have been recognized and the related fair values of those derivatives as of December 31, 2015 and December 31, 2014 were as follows (in thousands):

	As of December 31, 2015		As of December 31, 2014	
	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Derivatives designated as hedging instruments:				
Interest rate derivatives — asset derivatives	Other assets	$ —	Other assets	$ 1,416
Interest rate derivatives — liability derivatives	Other accrued liabilities	(4,489)	Other accrued liabilities	(6,414)
Interest rate derivatives — liability derivatives	Other noncurrent liabilities	(6,270)	Other noncurrent liabilities	—

The change in the fair values of ARRIS's derivative designated as hedging instruments recorded in the Consolidated Statements of Operations during the years ended December 31, 2015, 2014, and 2013 were as follows (in thousands):

	Statement of Operations Location	Years Ended December 31, 2015	2014	2013
Derivatives designated as hedging instruments:				
Interest rates derivatives	Interest expense	$7,495	$7,550	$3,132

Credit-risk-related contingent features

ARRIS has agreements with each of its derivative counterparties that contain a provision where the Company could be declared in default on its derivative obligations if repayment of the underlying indebtedness is accelerated by the lender due to the Company's default on the indebtedness. As of December 31, 2015, the fair value of derivatives in a net liability position, which includes accrued interest but excludes any adjustment for nonperformance risk, related to these agreements was $11.2 million. As of December 31, 2015, the Company has not posted any collateral related to these agreements nor has it required any of its counterparties to post collateral related to these or any other agreements.

Non-designated hedges of foreign currency risk

The Company has U.S. dollar functional currency entities that bill certain international customers in their local currency and foreign functional currency entities that procure in U.S. dollars. ARRIS also has certain predictable expenditures for international operations in local currency. Additionally, certain intercompany transactions are denominated in foreign currencies and subject to revaluation. To mitigate the volatility related to fluctuations in the foreign exchange rates for certain exposures, ARRIS has entered into various foreign currency contracts. As of December 31, 2015, the Company had option collars with notional amounts totaling 80 million euros which mature throughout 2016 and 2017, forward contracts with notional amounts totaling 75 million euros which mature throughout 2016 and 2017, forward contracts with a total notional amount of 90 million Australian dollars which mature throughout 2016 and forward contracts with notional amounts totaling 40 million Canadian dollars which mature throughout 2015.

As part of the Pace acquisition, the Company paid the former Pace shareholders 132.5 pence per share in cash consideration, which is approximately 434.3 million British pounds, in the aggregate, as of January 4, 2016. As such, the Company entered into foreign currency forward contracts to purchase British pounds and sell U.S. Dollars to mitigate the volatility related to fluctuations in the foreign exchange rate prior to the closing period. As of December 31, 2015, the Company had forward contracts with notional amounts totaling 385 million British pounds which mature on March 31, 2016. The contracts fixed the British pound to U.S. dollar forward exchange rate at various rates. During the year ended December 31, 2015, losses of $22.3 million were recorded related to the British pound forward contracts. These contracts were effectively closed upon the close of the Pace acquisition in January 2016.

The Company's objectives in using foreign currency derivatives are to add stability to foreign currency gains and losses recorded as other expense (income) and to manage its exposure to foreign currency movements. To accomplish this objective, the Company uses foreign currency option and foreign currency forward contracts as part of its foreign currency risk management strategy. The Company's foreign currency derivative instruments economically hedge certain risk but are not designated as hedges, and accordingly, all changes in the fair value of the instruments are recognized as a loss (gain) on foreign currency in the Consolidated Statements of Operations. The maximum time frame for ARRIS's derivatives is currently less than 18 months.

The following table indicates the location on the Consolidated Balance Sheets in which the Company's derivative assets and liabilities not designated as hedging instruments have been recognized and the related fair values of those derivatives as of December 31, 2015 and December 31, 2014 were as follows (in thousands):

	As of December 31, 2015		As of December 31, 2014	
	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Derivatives not designated as hedging instruments:				
Foreign exchange contracts — asset derivatives	Other current assets	$ 6,495	Other current assets	$ 2,876
Foreign exchange contracts — asset derivatives	Other assets	569	Other current assets	—
Foreign exchange contracts — liability derivatives	Other accrued liabilities	(23,632)	Other accrued liabilities	(201)
Foreign exchange contracts — liability derivatives	Other noncurrent liabilities	(739)	Other noncurrent liabilities	—

The change in the fair values of ARRIS's derivatives not designated as hedging instruments recorded in the Consolidated Statements of Operations during the years ended December 31, 2015, 2014, and 2013 were as follows (in thousands):

	Statement of Operations Location	Years Ended December 31, 2015	2014	2013
Derivatives not designated as hedging instruments:				
Foreign exchange contracts	Loss (gain) on foreign currency	$ 7,597	$ (4,527)	$ (428)

Note 9. Guarantees

Warranty

ARRIS provides warranties of various lengths to customers based on the specific product and the terms of individual agreements. The Company provides for the estimated cost of product warranties based on historical trends, the embedded base of product in the field, failure rates, and repair costs at the time revenue is recognized. Expenses related to product defects and unusual product warranty problems are recorded in the period that the problem is identified. While the Company engages in extensive product quality programs and processes, including actively monitoring and evaluating the quality of its suppliers, the estimated warranty obligation could be affected by changes in ongoing product failure rates, material usage and service delivery costs incurred in correcting a product failure, as well as specific product failures outside of ARRIS's baseline experience. If actual product failure rates, material usage or service delivery costs differ from estimates, revisions (which could be material) would be recorded against the warranty liability.

The Company offers extended warranties and support service agreements on certain products. Revenue from these agreements is deferred at the time of the sale and recognized on a straight-line basis over the contract period. Costs of services performed under these types of contracts are charged to expense as incurred, which approximates the timing of the revenue stream.

Information regarding the changes in ARRIS's aggregate product warranty liabilities for the years ending December 31, 2015 and 2014 were as follows (in thousands):

	2015	2014
Beginning balance	$ 74,320	$ 81,500
Accruals related to warranties (including changes in assumptions)	19,111	33,320
Settlements made (in cash or in kind)	(44,404)	(40,500)
Ending balance	$ 49,027	$ 74,320

Note 10. Segment Information

The "management approach" has been used to present the following segment information. This approach is based upon the way the management of the Company organizes segments for making operating decisions and assessing performance. Financial information is reported on the basis that it is used internally by the chief operating decision maker ("CODM") for evaluating segment performance and deciding how to allocate resources to segments. The Company's chief executive officer has been identified as the CODM.

The CODM manages the Company under two segments:

- ***Customer Premises Equipment ("CPE")*** — The CPE segment's product solutions include set-tops, gateways, and subscriber premises equipment that enable service providers to offer Voice, Video and high-speed data services to residential and business subscribers.
- ***Network & Cloud ("N&C")*** — The N&C segment's product solutions include cable modem termination system, video infrastructure, distribution and transmission equipment and cloud solutions that enable

facility-based service providers to construct a state-of-the-art residential and metro distribution network. The portfolio also includes a full suite of global services that offer technical support, professional services and system integration offerings to enable solutions sales of ARRIS's end-to-end product portfolio.

These operating segments are determined based on the nature of the products and services offered. The measures that are used to assess the reportable segment's operating performance are sales and direct contribution. Direct contribution is defined as gross margin less direct operating expense. The "Corporate and Unallocated Costs" category of expenses include corporate sales and marketing, home office general and administrative expenses, annual bonus and equity compensation. These expenses are not included in the measure of segment direct contribution and as such are reported as "Corporate and Unallocated Costs" and are included in the reconciliation to income (loss) before income taxes. A measure of assets is not applicable, as segment assets are not regularly reviewed by the CODM for evaluating performance or allocating resources.

The tables below present information about the Company's reportable segments for the years ended December 31, 2015, 2014 and 2013 (in thousands):

	2015	2014	2013
Net sales to external customers:			
CPE	$3,136,585	$3,690,454	$2,448,381
N&C	1,661,594	1,637,544	1,193,001
Other	153	(5,077)	(20,480)
Total	4,798,332	5,322,921	3,620,902
Direct contribution:			
CPE	548,840	791,244	509,473
N&C	487,166	430,943	264,589
Segment total	1,036,006	1,222,187	774,062
Corporate and unallocated costs	(568,336)	(606,834)	(515,391)
Amortization of intangible assets	(227,440)	(236,521)	(193,637)
Integration, acquisition, restructuring and other	(29,277)	(37,498)	(83,047)
Operating income (loss)	210,953	341,334	(18,013)
Interest expense	70,936	62,901	67,888
Loss on investments	6,220	10,961	2,698
Interest income	(2,379)	(2,590)	(2,936)
Loss (gain) on foreign currency	20,761	2,637	(3,502)
Other expense (income), net	8,362	28,195	13,989
Income (loss) before income taxes	$ 107,053	$ 239,230	$ (96,150)

For the years ended December 31, 2015, 2014 and 2013, the compositions of our corporate and unallocated costs that are reflected in the consolidated statement of operations were as follows (in thousands):

	2015	2014	2013
Corporate and unallocated costs:			
Cost of sales	$ 56,311	$ 69,973	$122,460
Selling, general and administrative expenses	349,993	349,693	278,921
Research and development expenses	162,032	187,168	114,010
Total	$568,336	$606,834	$515,391

The following table summarizes the Company's net intangible assets and goodwill by reportable segment as of December 31, 2015 and 2014 (in thousands):

	Network & Cloud	CPE	Total
December 31, 2015			
Goodwill	$331,381	$682,582	$1,013,963
Intangible assets, net	284,528	525,920	810,448
December 31, 2014			
Goodwill	$251,470	$684,597	$ 936,067
Intangible assets, net	298,799	644,589	943,388

The following table summarizes the Company's revenues by products and services as of December 31, 2015, 2014 and 2013 (in thousands):

	2015	2014	2013
CPE:			
CPE products	$3,136,585	$3,690,454	$2,448,381
Network & Cloud:			
Infrastructure equipment	1,407,735	1,435,676	1,020,722
Global services	181,892	141,625	120,314
Cloud solutions	71,967	60,243	51,965
Sub-total	1,661,594	1,637,544	1,193,001
Other:			
Other	153	(5,077)	(20,480)
Total net sales	$4,798,332	$5,322,921	$3,620,902

The Company's two largest customers (including their affiliates, as applicable) are Comcast and Time Warner Cable. Over the past year, certain customers' beneficial ownership may have changed as a result of mergers and acquisitions. Therefore the revenue for ARRIS's customers for prior periods has been adjusted to include the affiliates under common control. A summary of sales to these customers for 2015, 2014 and 2013 is set forth below (in thousands, except percentages):

	Years ended December 31,		
	2015	2014	2013
Comcast and affiliates	$ 1,007,892	$ 1,012,367	$ 674,977
% of sales	21.0%	19.0%	18.6%
Time Warner Cable and affiliates	$ 687,645	$ 600,770	$ 331,829
% of sales	14.3%	11.3%	9.2%

ARRIS sells its products primarily in the United States. The Company's international revenue is generated from Asia Pacific, Canada, Europe and Latin America. Sales to customers outside of United States were approximately 28.8%, 25.7% and 32.1% of total sales for the years ended December 31, 2015, 2014 and 2013, respectively. International sales for the years ended December 31, 2015, 2014 and 2013 were as follows (in thousands):

	Years Ended December 31,		
	2015	2014	2013
Americas, excluding U.S (1)	$ 880,581	$ 900,822	$ 746,146
Asia Pacific	142,893	147,921	153,674
EMEA	356,275	316,975	263,910
Total international sales	$ 1,379,749	$ 1,365,718	$ 1,163,730

(1) Excludes U.S. sales of $3,418.6 million, $3,957.2 million and $2,457.2 million for the years ended December 31, 2015, 2014 and 2013, respectively.

The following table summarizes ARRIS's international property, plant and equipment assets by geographic region as of December 31, 2015 and 2014 (in thousands):

	As of December 31,	
	2015	2014
Americas, excluding U.S.	$ 6,659	$ 7,303
Asia Pacific	74,651	76,970
EMEA	7,265	8,129
Total	$88,575	$92,402

(1) Excludes U.S. assets of $223.7 million and $274.0 million for the years ended December 31, 2015 and 2014, respectively.

Note 11. Inventories

The components of inventory are as follows, net of reserves (in thousands):

	December 31,	
	2015	2014
Raw material	$ 60,287	$ 61,068
Work in process	3,076	6,713
Finished goods	338,229	333,384
Total inventories, net	$401,592	$401,165

Note 12. Property, Plant and Equipment

Property, plant and equipment, at cost, consisted of the following (in thousands):

	December 31,	
	2015	2014
Land	$ 68,562	$ 87,952
Buildings and leasehold improvements	141,171	141,581
Machinery and equipment	407,110	402,709
	616,843	632,242
Less: Accumulated depreciation	(304,532)	(265,811)
Total property, plant and equipment, net	$ 312,311	$ 366,431

During 2014, the Company entered into a binding letter of intent for the sale of land and building for $2.9 million which was lower than its carrying amount of $4.8 million. The asset was reclassified as held for sale and was measured at its fair value less cost to sell and classified as a component of "Other current assets" as of December 31, 2014. The Company recorded an impairment charge of $2.1 million to reduce the asset's carrying amount to its estimated fair value less cost to sell during 2014, which is reported in the Consolidated Statements of Operations under the caption "Other expense (income), net." The sale closed in the first quarter of 2015.

Note 13. Lease Financing Obligation

Sale-leaseback of San Diego Office Complex:

In 2015, the Company sold its San Diego office complex consisting of land and buildings with a net book value of $71.0 million, for total consideration of $85.5 million. The Company concurrently entered into a leaseback arrangement for two buildings on the San Diego campus ("Building 1" and "Building 2") with an initial leaseback term of ten years for Building 1 and a maximum term of one year for Building 2. The Company determined that the sale-leaseback of Building 1 did not qualify for sale-leaseback accounting due to continuing involvement that will exist for the 10-year lease term. Accordingly, the carrying amount of Building 1 will remain on the Company's balance sheet and will be depreciated over its remaining useful life with the proceeds reflected as a financing obligation.

At December 31, 2015, the minimum lease payments required on the financing obligation were as follows (in thousands):

2016	$ 4,016
2017	4,136
2018	4,260
2019	4,388
2020	4,520
Thereafter through 2025	20,757
Total minimum lease payments	$42,077

The Company concluded that Building 2 qualified for sale-leaseback accounting with the subsequent leaseback classified as an operating lease. A loss of $5.3 million was recorded at the closing of the transaction in 2015.

Note 14. Indebtedness

The following is a summary of indebtedness and lease financing obligations as of December 31, 2015 and 2014 (in thousands):

	As of December 31, 2015	As of December 31, 2014
Current liabilities:		
Term A loan	$ 49,500	$ 75,625
Lease finance obligation	758	—
Current obligations	50,258	75,625
Current deferred financing fees and debt discount	(6,667)	(8,601)
	43,591	67,024
Noncurrent liabilities:		
Term A loan	915,750	928,125
Term B loan	543,812	543,812
Revolver	—	—
Lease finance obligation	58,676	—
Noncurrent obligations	1,518,238	1,471,937
Noncurrent deferred financing fees and debt discount	(21,995)	(22,977)
	1,496,243	1,448,960
Total	$ 1,539,834	$ 1,515,984

Senior Secured Credit Facilities

On June 18, 2015, ARRIS amended and restated its existing credit agreement dated March 27, 2013 (the "Existing Credit Agreement") to improve the terms and conditions of the credit agreement, extend the maturities of certain loan facilities, increase the amount of the revolving credit facility, and add a new term A-1 loan facility to fund the acquisition of Pace. The credit facility under the amended credit agreement (the "Amended Credit Agreement") was entered into with Bank of America, N.A. and various other institutions, and is comprised of (i) a "Term Loan A Facility" of $990 million, (ii) a "Term Loan B Facility" of $543.8 million, (iii) a "Revolving Credit Facility" of $500 million and (iv) a "Term Loan A-1 Facility" of $800 million, was funded upon the closing of the acquisition of Pace in 2016. The Amended Credit Agreement refinanced the Term Loan A Facility and Revolving Credit Facility under the Existing Credit Agreement while the Term Loan B Facility is a continuation of the Term Loan B Facility under the Existing Credit Agreement. Under the Amended Credit Agreement, the Term Loan A Facility and the Revolving Credit Facility will mature on June 18, 2020. The Term Loan B Facility will mature on April 17, 2020. ARRIS determined that the refinancing transaction was treated as a debt modification as the changes in the terms of the amended Term Loan A Facility and Revolving Credit Facility were not considered substantial. In connection with the Amended Credit Agreement, as of December 31, 2015, the Company capitalized approximately $5.0 million of financing fees and $3.2 million of original issuance discount. An additional $2.3 million of original issuance discount will be capitalized in the first quarter of 2016 related to drawing on the Term A-1 Facility. In addition, the Company expensed approximately $13.0 million of debt issuance costs and wrote off approximately $2.1 million of existing debt issuance costs associated with certain lenders who were not party to the amended Term Loan A Facility and Revolving Credit Facility, which were included as interest expense in the Consolidated Statements of Operations for the year ended December 31, 2015.

Interest rates on borrowings under the senior secured credit facilities are set forth in the table below. As of December 31, 2015, ARRIS had $1,509.1 million principal amount outstanding under the Term Loan A and

Term Loan B Facilities, no borrowings under the Revolving Credit Facility and letters of credit totaling $2.1 million issued under the Revolving Credit Facility.

	Rate	As of December 31, 2015
Term Loan A	LIBOR + 1.75 %	2.17%
Term Loan B	LIBOR(1) + 2.50 %	3.25%
Revolving Credit Facility (2)	LIBOR + 1.75 %	Not Applicable

(1) Includes LIBOR floor of 0.75%

(2) Includes unused commitment fee of 0.35% and letter of credit fee of 1.75% not reflected in interest rate above.

Borrowings under the senior secured credit facilities are secured by first priority liens on substantially all of the assets of ARRIS and certain of its present and future subsidiaries who are or become parties to, or guarantors under, the Amended Credit Agreement governing the senior secured credit facilities. The Amended Credit Agreement provides terms for mandatory prepayments and optional prepayments and commitment reductions. The Amended Credit Agreement also includes events of default, which are customary for facilities of this type (with customary grace periods, as applicable), including provisions under which, upon the occurrence of an event of default, all amounts outstanding under the credit facilities may be accelerated. The Amended Credit Agreement contains usual and customary limitations on indebtedness, liens, restricted payments, acquisitions and asset sales in the form of affirmative, negative and financial covenants, which are customary for financings of this type, including the maintenance of a minimum interest coverage ratio of 3.50:1 and a maximum leverage ratio of 3.75:1 (with a scheduled decrease to 3.50:1 in the first quarter of 2017). As of December 31, 2015, ARRIS was in compliance with all covenants under the Amended Credit Agreement.

The Amended Credit Agreement provides for certain adjustments to the interest rates paid on the Term Loan A, Term Loan A-1, Term Loan B and Revolving Credit Facility based upon certain leverage ratios.

During the year ended December 31, 2015, the Company made mandatory prepayments of approximately $38.5 million related to the senior secured credit facilities. In addition, the Company paid $15 million of debt assumed in the ActiveVideo acquisition during the second quarter of 2015. Quarterly mandatory principal repayments on Term Loan A-1 will begin in the first quarter of 2016.

As of December 31, 2015, the scheduled maturities of the contractual debt obligations for the next five years are as follows (in thousands):

2016	$ 49,500
2017	49,500
2018	49,500
2019	49,500
2020	1,311,062

Note 15. Earnings Per Share

The following is a reconciliation of the numerators and denominators of the basic and diluted earnings (loss) per share computations for the periods indicated (in thousands, except per share data):

	For the Years Ended December 31,		
	2015	2014	2013
Basic:			
Net income (loss) attributable to ARRIS Group Inc.	$ 92,181	$327,211	$ (48,760)
Weighted average shares outstanding	146,388	144,386	131,980
Basic earnings (loss) per share	$ 0.63	$ 2.27	$ (0.37)
Diluted:			
Net income (loss) attributable to ARRIS Group Inc.	$ 92,181	$327,211	$ (48,760)
Weighted average shares outstanding	146,388	144,386	131,980
Net effect of dilutive shares	2,971	3,894	—
Total	149,359	148,280	131,980
Diluted earnings (loss) per share	$ 0.62	$ 2.21	$ (0.37)

For the year ended December 31, 2015, 2014 and 2013, approximately 6.8 thousand, 4.3 thousand and 1.1 million of the equity-based awards, respectively, were excluded from the computation of diluted earnings per share shares because their effect would have been anti-dilutive. These exclusions are made if the exercise price of these equity-based awards is in excess of the average market price of the common stock for the period, or if the Company has net losses, both of which have an anti-dilutive effect.

During the twelve months ended December 31, 2015, the Company issued 3.2 million shares of its common stock related to stock option exercises and the vesting of restricted shares, as compared to 3.1 million shares for the twelve months ended December 31, 2014.

In 2013, in connection with the Motorola Home acquisition, Google was issued approximately 10.6 million shares of ARRIS's common stock as part of the purchase consideration. Furthermore, Comcast was given an opportunity to invest in ARRIS, and the Company entered into a separate agreement accounted for as a contingent equity forward with a subsidiary of Comcast providing for the purchase by it from the Company of approximately 10.6 million shares of common stock for $150 million.

The Company issued 3.1 million shares of its common stock in the fourth quarter of 2013 in conjunction with redeeming its 2% Convertible Notes.

The Company has not paid cash dividends on its stock since its inception.

Note 16. Income Taxes

Income (loss) before income taxes (in thousands):

	Years Ended December 31,		
	2015	2014	2013
Domestic	$ 47,063	$180,133	$(128,588)
Foreign	59,990	59,097	32,438
	$107,053	$239,230	$ (96,150)

Income tax expense (benefit) consisted of the following (in thousands):

	Years Ended December 31,		
	2015	2014	2013
Current — Federal	$ (5,063)	$ 45,937	$ (5,133)
State	7,204	13,260	(40)
Foreign	15,035	18,136	10,624
	17,176	77,333	5,451
Deferred — Federal	7,521	(140,404)	(50,485)
State	(2,402)	(19,978)	(2,189)
Foreign	299	(4,932)	(167)
	5,418	(165,314)	(52,841)
Income tax expense (benefit)	$22,594	$ (87,981)	$(47,390)

A reconciliation of the U.S. statutory federal income tax rate of 35% and the effective income tax rates is as follows:

	Years Ended December 31,		
	2015	2014	2013
Statutory U.S. federal income tax rate	35.0%	35.0%	35.0%
Effects of:			
State income taxes, net of federal benefit	5.2	(6.6)	2.2
Acquired deferred tax assets	5.8	(16.5)	—
U.S. domestic manufacturing deduction	(0.7)	(2.1)	1.1
Nontaxable Comcast derivative gain	—	—	(9.6)
Facilitative acquisition costs	—	—	(3.5)
Research and development tax credits	(26.6)	(8.7)	26.8
Subpart F income	4.8	0.8	—
Changes in valuation allowance	(26.6)	(44.2)	—
Foreign tax credits	(20.7)	(0.6)	1.3
Non-deductible officer compensation	5.3	0.6	(0.5)
Non-U.S. tax rate differential	(5.0)	(2.6)	1.3
Recapture of dual consolidated losses	1.1	4.0	—
Taiwan gain	34.3	—	—
Other, net	9.2	4.1	(4.8)
	21.1%	(36.8)%	49.3%

Deferred income taxes reflect the net tax effects of temporary differences between carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of ARRIS's net deferred income tax assets (liabilities) were as follows (in thousands):

	December 31,	
	2015	2014
Deferred income tax assets (1):		
Inventory costs	$ 28,728	$ 34,695
Accrued vacation	7,138	7,980
Acquisition charges	6,556	—
Allowance for bad debt	4,396	—
Equity compensation	14,673	14,639
Deferred revenue	—	1,001
Federal/state net operating loss carryforwards	95,571	217,656
Federal capital loss carryforwards	—	7,701
Foreign net operating loss carryforwards	10,989	11,840
Research and development credits	79,809	62,661
Property, plant and equipment, depreciation and basis differences	1,285	—
Pension and deferred compensation	19,166	18,393
Warranty reserve	18,215	26,187
Capitalized research and development	215,894	226,270
Other	22,929	42,188
Total deferred income tax assets	525,349	671,211
Deferred income tax liabilities:		
Property, plant and equipment, depreciation and basis differences	—	(19,744)
Excess tax on future repatriation of foreign earnings	(1,184)	(1,184)
Other noncurrent liabilities	(3,210)	(30,904)
Goodwill and intangible assets	(248,231)	(316,192)
Total deferred income tax liabilities	(252,625)	(368,024)
Net deferred income tax assets	272,724	303,187
Valuation allowance	(87,788)	(118,629)
Net deferred income tax assets (liabilities)	$ 184,936	$ 184,558

(1) See Note 3 *Impact of Recently Issued Accounting Standards* of Notes to Consolidated Financial Statements regarding the early adoption of Balance Sheet Classification of Deferred Taxes requiring all deferred tax assets and liabilities, and any related valuation allowance, to be classified as noncurrent on the balance sheet.

As of December 31, 2015 and December 31, 2014, ARRIS had $218.9 million and $552.9 million, respectively, of U.S. federal net operating losses available to offset against future ARRIS taxable income. During 2015, ARRIS utilized approximately $327.1 million of U.S. federal net operating losses against taxable income. The U.S. federal net operating losses may be carried forward for twenty years. The available acquired U.S. Federal net operating losses as of December 31, 2015, will expire between the years 2015 and 2031. A significant portion of the acquired U.S. federal net operating losses expire by 2017.

As of December 31, 2015, ARRIS also had $353.1 million of state net operating loss carryforwards in various states. The amounts available for utilization vary by state due to the apportionment of the Company's taxable income and state law governing the expiration of these net operating losses. State net operating loss carryforwards of approximately $28.9 million relate to the exercise of employee stock options and restricted stock ("equity compensation"). Any future cash benefit resulting from the utilization of these state net operating losses attributable to this portion of equity compensation will be credited directly to paid-in capital during the year in which the cash benefit is realized.

ARRIS has foreign net operating loss carryforwards available, as of December 31, 2015, of approximately $54.9 million with varying expiration dates. Approximately $17.8 million of the total foreign net operating loss carryforwards relate to ARRIS's Irish subsidiary and have an indefinite life. Approximately $11.8 million of the foreign net operating loss carryforwards relate to the Canadian subsidiary and expire within 18 years.

During the tax years ending December 31, 2015, and 2014, we utilized $0 and $25.7 million, respectively, of U.S. federal research and development credits to reduce U.S. federal income tax liabilities. As of December 31, 2015, ARRIS has $70.7 million of available U.S. federal research and development tax credits and $28.3 million of available state research and development tax credits to carry forward to subsequent years. The remaining unutilized U.S. federal research and development tax credits can be carried back one year and carried forward twenty years. The state research and development tax credits carry forward and will expire pursuant to various applicable state rules.

ARRIS's ability to use U.S. federal and state net operating loss carryforwards to reduce future taxable income, or to use U.S. federal and state research and development tax credit and foreign tax credit carryforwards to reduce future income tax liabilities, is subject to restrictions attributable to equity transactions that resulted in a change of ownership during prior tax years, as defined in Internal Revenue Code Sections 382, 383 and the separate return limitation year ("SRLY") rules.

The valuation allowance for deferred income tax assets of $87.8 million and $118.6 million at December 31, 2015 and 2014, respectively, relates to the uncertainty surrounding the realization of certain deferred income tax assets in various jurisdictions. The $30.8 million net reduction in valuation allowances for the year was due primarily to a reduction in the valuation allowance on net operating losses from the Motorola Home acquisition. The Company continually reviews the adequacy of its valuation allowances by reassessing whether it is more-likely-than-not to realize its various deferred income tax assets.

An analysis of the deferred tax asset valuation allowances is as follows: (in thousands):

	2015	2014	2013
Balance at beginning of fiscal year	$118,629	$163,745	$ 17,973
Additions	3,312	37,708	147,349
Deductions	(34,153)	(82,824)	(1,577)
Balance at end of fiscal year	$ 87,788	$118,629	$163,745

As of December 31, 2015, the Company did not provide U.S. federal income taxes or foreign withholding taxes on approximately $61 million of undistributed earnings of its foreign subsidiaries as such earnings are intended to be reinvested indefinitely. The Company did record a deferred tax liability of approximately $1.2 million relating to approximately $5.4 million of distributable earnings of an Israeli subsidiary. Should earnings of the other foreign subsidiaries be distributed in the form of dividends, or otherwise, ARRIS would have additional taxable income and, depending on the Company's tax posture in the year of repatriation, may have to pay additional income taxes. Withholding taxes in various jurisdictions may also apply to the repatriation of foreign earnings. Determination of the amount of unrecognized income tax liability related to these permanently reinvested and undistributed foreign subsidiary earnings is not practicable because of the complexities associated with this hypothetical calculation.

Tabular Reconciliation of Unrecognized Tax Benefits (in thousands):

	December 31,		
	2015	2014	2013
Beginning balance	$48,019	$28,344	$25,704
Gross increases — tax positions in prior period	1,599	17,636	2,442
Gross decreases — tax positions in prior period	(2,185)	(4,115)	(21)
Gross increases — current-period tax positions	9,578	9,979	6,999
Increases (decreases) from acquired businesses	—	(196)	2,014
Decreases relating to settlements with taxing authorities and other	(6,689)	(2,480)	(1,098)
Decreases due to lapse of statute of limitations	(403)	(1,149)	(7,696)
Ending balance	$49,919	$48,019	$28,344

The Company and its subsidiaries file income tax returns in the U.S. federal jurisdiction, and various state and foreign jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal, state and local, or non-U.S. income tax examinations by tax authorities for years before 2011. As of December 31, 2015, the Company and its subsidiaries were under income tax audit in nine jurisdictions (the state of California, the state of New York, the state of Michigan, the state of Illinois, the state of New Jersey, China, Vietnam, Japan and Portugal) and the Company has not received notices of any planned or proposed income tax audits.

ARRIS does not anticipate any audit adjustments in excess of its current accrual for uncertain tax positions.

At the end of 2015, the Company's total tax liability related to uncertain net tax positions totaled approximately $46.2 million, all of which would cause the effective income tax rate to change upon the recognition. The difference between the $49.9 million of unrecognized tax benefits reported in the tabular reconciliation above and the $46.2 million of total tax liability relating to uncertain net tax positions are attributable to interest, penalties and the federal benefit of state deductions. Based on information currently available, the Company anticipates that over the next twelve month period, statutes of limitations may close and audit settlements will occur relating to existing unrecognized tax benefits of approximately $0.5 million primarily arising from U.S. Federal and state tax related items. The Company reported approximately $1.7 million and $1.7 million, respectively, of interest and penalty accrual related to the anticipated payment of these potential tax liabilities as of December 31, 2015 and 2014. The Company classifies interest and penalties recognized on the liability for uncertain tax positions as income tax expense.

Note 17. Stock-Based Compensation

ARRIS grants stock awards under its 2011 Stock Incentive Plan ("SIP"). Upon approval of the 2011 SIP, all shares available for grant under existing stock incentive plans were no longer available. However, all outstanding options granted under the previous plans are still exercisable. The Board of Directors approved the SIP and the prior plans to facilitate the retention and continued motivation of key employees, consultants and directors, and to align more closely their interests with those of the Company and its stockholders.

Awards under the SIP may be in the form of stock options, stock grants, stock units, restricted stock, stock appreciation rights, performance shares and units, and dividend equivalent rights. A total of 17,500,000 shares of the Company's shares may be issued pursuant to the SIP. The SIP has been designed to allow for flexibility in the form of awards; however, awards denominated in shares of common stock other than stock options and stock appreciation rights will be counted against the SIP limit as 1.87 shares for every one share covered by such an award. The vesting requirements for issuance under the SIP may vary; however, awards generally are required to have a minimum three-year vesting period or term.

In connection with the 2011 acquisition of BigBand Networks, Inc., ARRIS assumed the BigBand Networks, Inc. 2007 Equity Incentive Plan (the "Assumed BigBand Plan"), including the restricted stock units outstanding under the Assumed BigBand Plan at the time of the acquisition. ARRIS may continue to grant awards under the Assumed BigBand Plan in certain circumstances so long as the grants comply with the applicable requirements of NASDAQ. A total of 125,352 shares of the Company's ordinary shares remain available for issuance under the Assumed BigBand Plan.

Stock Options

ARRIS grants stock options to certain employees. Stock options generally vest over three or four years of service and have either seven or ten year contractual terms. The exercise price of an option is equal to the fair market value of ARRIS's stock on the date of grant.

There were no new options granted in 2015, 2014 and 2013. The total intrinsic value of options exercised during 2015, 2014 and 2013 was approximately $0.7 million, $6.5 million and $9.6 million, respectively.

A summary of activity of ARRIS's options granted under its stock incentive plans is presented below:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Beginning balance, December 31, 2014	38,000	$ 11.97		
Exercised	(35,422)	11.93		
Expired	(2,578)	12.57		
Ending balance, December 31, 2015	—	—	—	$ —
Exercisable at December 31, 2015	—	—	—	$ —

Restricted Stock (Non-Performance) and Stock Units

ARRIS grants restricted stock and stock units to certain employees and its non-employee directors. The Company records a fixed compensation expense equal to the fair market value of the shares of restricted stock granted on a straight-line basis over the requisite services period for the restricted shares. The Company applies an estimated forfeiture rate based upon historical rates. The fair value is the market price of the underlying ordinary shares on the date of grant.

In connection with the Pace acquisition, ARRIS accelerated the vesting of the time-based restricted shares that otherwise were scheduled to vest in 2016 for all of its executive officers and additional acceleration of Messrs. Stanzione and Margolis time-based restricted shares that otherwise would vest in 2017, 2018 and 2019. The total shares accelerated in December 2015 were 504,833 shares.

The following table summarizes ARRIS's unvested restricted stock (excluding performance-related) and stock unit transactions during the year ending December 31, 2015:

	Shares	Weighted Average Grant Date Fair Value
Unvested at December 31, 2014	6,991,789	$ 19.29
Granted	2,336,360	29.08
Vested	(3,019,824)	18.13
Forfeited	(323,076)	21.24
Unvested at December 31, 2015	5,985,249	23.59

Restricted Shares — Subject to Comparative Market Performance

ARRIS grants to certain employees restricted shares, in which the number of shares is dependent upon the Company's total shareholder return as compared to the shareholder return of the NASDAQ composite over a three year period. The number of shares which could potentially be issued ranges from zero to 200% of the target award. For the shares granted in 2013, the three-year measurement period ended on December 31, 2015. However, in connection with the Pace acquisition, ARRIS accelerated the vesting of the market-based restricted shares that otherwise were scheduled to vest in 2016 for all of its executive officers using measurement period ended on December 23, 2015. This resulted in an achievement of 200.0% of the target award, or 504,810 shares. The remaining grants outstanding that are subject to market performance are 444,790 shares at target; at 200% performance 889,580 would be issued. Compensation expense is recognized on a straight-line basis over the three year measurement period and is based upon the fair market value of the shares estimated to be earned. The fair value of the restricted shares is estimated on the date of grant using a Monte Carlo Simulation model.

The total fair value of restricted shares, including both non-performance and performance-related shares, that vested during 2015, 2014 and 2013 was $118.3 million, $82.6 million and $36.3 million, respectively.

Employee Stock Purchase Plan ("ESPP")

ARRIS offers an ESPP to certain employees. The plan complies with Section 423 of the U.S. Internal Revenue Code, which provides that employees will not be immediately taxed on the difference between the market price of the stock and a discounted purchase price if it meets certain requirements. Participants can request that up to 10% of their base compensation be applied toward the purchase of ARRIS ordinary shares under ARRIS's ESPP. Purchases by any one participant are limited to $25,000 (based upon the fair market value) in any one year. The exercise price is the lower of 85% of the fair market value of the ARRIS ordinary shares on either the first day of the purchase period or the last day of the purchase period. A plan provision which allows for the more favorable of two exercise prices is commonly referred to as a "look-back" feature. Any discount offered in excess of five percent generally will be considered compensatory and appropriately is recognized as compensation expense. Additionally, any ESPP offering a look-back feature is considered compensatory. ARRIS uses the Black-Scholes option valuation model to value shares issued under the ESPP. The valuation is comprised of two components; the 15% discount of a share of ordinary shares and 85% of a six month option held (related to the look-back feature). The weighted average assumptions used to estimate the fair value of purchase rights granted under the ESPP for 2015, 2014 and 2013, were as follows: risk-free interest rates of 0.1%; a dividend yield of 0%; volatility factor of the expected market price of ARRIS's stock of 0.41, 0.37, and 0.26, respectively; and a weighted average expected life of 0.5 year for each. The Company recorded stock compensation expense related to the ESPP of approximately $5.1 million, $4.1 million and $1.4 million for the years ended December 31, 2015, 2014 and 2013, respectively.

Unrecognized Compensation Cost

As of December 31, 2015, there was approximately $112.7 million of total unrecognized compensation cost related to unvested share-based awards granted under the Company's incentive plans. This compensation cost is expected to be recognized over a weighted-average period of 2.6 years.

Note 18. Employee Benefit Plans

The Company sponsors a qualified and a non-qualified non-contributory defined benefit pension plan that covers certain U.S. employees. As of January 1, 2000, the Company froze the qualified defined pension plan benefits for its participants. These participants elected to enroll in ARRIS's enhanced 401(k) plan.

The U.S. pension plan benefit formulas generally provide for payments to retired employees based upon their length of service and compensation as defined in the plans. ARRIS's investment policy is to fund the qualified plan as required by the Employee Retirement Income Security Act of 1974 ("ERISA") and to the extent that such contributions are tax deductible.

The investment strategies of the plans place a high priority on benefit security. The plans invest conservatively so as not to expose assets to depreciation in adverse markets. The plans' strategy also places a high priority on earning a rate of return greater than the annual inflation rate along with maintaining average market results. The plan has targeted asset diversification across different asset classes and markets to take advantage of economic environments and to also act as a risk minimizer by dampening the portfolio's volatility. The following table summarizes the weighted average pension asset allocations as December 31, 2015 and 2014:

	Weighted Average Allocation		
	Target	Actual	
	2015	2015	2014
Equity securities	40-45%	40%	43%
Debt securities	0-5	2	3
Cash and cash equivalents	50-60	58	54
	100%	100%	100%

The following table summarizes the Company's U.S. pension plan assets by category and by level (as described in Note 7 of the Notes to the Consolidated Financial Statements) as of December 31, 2015 and 2014 (in thousands):

	December 31, 2015			
	Level 1	Level 2	Level 3	Total
Cash and cash equivalents (1)	$ —	$7,424	$ —	$ 7,424
Equity securities (2):				
U.S. large cap	1,330	—	—	1,330
U.S. mid cap	1,160	—	—	1,160
U.S. small cap	1,160	—	—	1,160
International	1,757	—	—	1,757
Fixed income securities (3):	685	—	—	685
Total	$6,092	$7,424	$ —	$13,516

	December 31, 2014			
	Level 1	Level 2	Level 3	Total
Cash and cash equivalents (1)	$ —	$7,752	$ —	$ 7,752
Equity securities (2):				
U.S. large cap	1,571	—	—	1,571
U.S. mid cap	1,640	—	—	1,640
U.S. small cap	1,367	—	—	1,367
International	2,050	—	—	2,050
Fixed income securities (3):	205	—	—	205
Total	$6,833	$7,752	$ —	$14,585

(1) Cash and cash equivalents, which are used to pay benefits and administrative expenses, are held in a stable value fund.
(2) Equity securities consist of mutual funds and the underlying investments are indexes. Investments in mutual funds are valued at the net asset value per share multiplied by the number of shares held.
(3) Fixed income securities consist of bonds securities in mutual funds, and are valued at the net asset value per share multiplied by the number of shares held.

The Company has established a rabbi trust to fund the pension obligations of the Chief Executive Officer under his Supplemental Retirement Plan including the benefit under the Company's non-qualified defined benefit plan. In addition, the Company has established a rabbi trust for certain executive officers to fund the Company's pension liability to those officers under the non-qualified plan. Effective June 30, 2013, the Company amended the Supplemental Retirement Plan. This amendment effectively froze entry of any new participants into the Supplemental Plan and, for existing participants, a freeze on any additional benefit accrual after June 30, 2013. The participant's benefit will continue to be distributed in accordance with the provisions of the Supplemental Plan but the final benefit accrual was frozen as of June 30, 2013. A curtailment gain of approximately $0.3 million, which represents the difference in the projected benefit obligation and the accumulated benefit obligation at June 30, 2013, offsets the existing plan loss and lowers future pension expense.

Summary data for the U.S. non-contributory defined benefit pension plans is as follows (in thousands):

	Years Ended December 31,	
	2015	2014
Change in Projected Benefit Obligation:		
Projected benefit obligation at beginning of year	$ 46,550	$ 40,382
Service cost	—	—
Interest cost	1,716	1,783
Actuarial (gain) loss	(3,962)	5,692
Benefit payments	(1,305)	(1,307)
Other	—	—
Projected benefit obligation at end of year	$ 42,999	$ 46,550
Change in Plan Assets:		
Fair value of plan assets at beginning of year	$ 14,585	$ 15,162
Actual return on plan assets	81	575
Company contributions	155	155
Expenses and benefits paid from plan assets	(1,305)	(1,307)
Other	—	—
Fair value of plan assets at end of year (1)	$ 13,516	$ 14,585
Funded Status:		
Funded status of plan	$ (29,483)	$ (31,965)
Unrecognized actuarial loss	9,196	13,233
Net amount recognized	$ (20,287)	$ (18,732)

(1) In addition to the pension plan assets, ARRIS has established two rabbi trusts to further fund the pension obligations of the Chief Executive and certain executive officers of $18.0 million as of December 31, 2015 and $20.3 million as of December 31, 2014, and are included in Investments on the Consolidated Balance Sheets.

Amounts recognized in the statement of financial position consist of (in thousands):

	Years Ended December 31,	
	2015	2014
Current liabilities	$ (426)	$ (393)
Noncurrent liabilities	(29,057)	(31,572)
Accumulated other comprehensive income (1)	9,196	13,233
Total	$ (20,287)	$ (18,732)

(1) The accumulated other comprehensive income on the Consolidated Balance Sheets as of December 31, 2015 and 2014 is presented net of income tax.

Other changes in plan assets and benefit obligations recognized in other comprehensive income (loss) are as follows (in thousands):

	Years Ended December 31,		
	2015	2014	2013
Net (gain) loss	$(3,203)	$5,992	$(2,359)
Amortization of net loss	(834)	(305)	(607)
Settlement charge	—	—	(318)
Total recognized in other comprehensive income (loss)	$(4,037)	$5,687	$ 3,284

The following table summarizes the amounts in other comprehensive income (loss) expected to be amortized and recognized as a component of net periodic benefit cost in 2016 (in thousands):

Amortization of net loss	$1,711

Information for defined benefit plans with accumulated benefit obligations in excess of plan assets is as follows (in thousands):

	December 31,	
	2015	2014
Accumulated benefit obligation	$42,999	$46,550
Projected benefit obligation	$42,999	$46,550
Plan assets	$13,516	$14,585

Net periodic pension cost for 2015, 2014 and 2013 for pension and supplemental benefit plans includes the following components (in thousands):

	2015	2014	2013
Service cost	$ —	$ —	$ 122
Interest cost	1,716	1,783	1,619
Return on assets (expected)	(839)	(874)	(876)
Amortization of net actuarial loss (1)	834	305	607
Net periodic pension cost	$1,711	$1,214	$1,472

(1) ARRIS uses the allowable 10% corridor approach to determine the amount of gains/losses subject to amortization in pension cost. Gains/losses are amortized on a straight-line basis over the average future service of members expected to receive benefits

The weighted-average actuarial assumptions used to determine the benefit obligations for the three years presented are set forth below:

	2015	2014	2013
Assumed discount rate for plan participants	4.15%	3.75%	4.50%

The weighted-average actuarial assumptions used to determine the net periodic benefit costs are set forth below:

	2015	2014	2013
Assumed discount rate for plan participants	3.75%	4.50%	3.75%
Rate of compensation increase	N/A	N/A	3.75%
Expected long-term rate of return on plan assets	6.00%	6.00%	6.00%

The expected long-term rate of return on assets is derived using the building block approach which includes assumptions for the long term inflation rate, real return, and equity risk premiums.

The Company estimates it will make funding contributions of $728 thousand in 2016.

As of December 31, 2015, the expected benefit payments related to the Company's U.S. defined benefit pension plans during the next ten years are as follows (in thousands):

2016	$ 1,626
2017	14,360
2018	1,652
2019	1,697
2020	1,814
2021 — 2025	9,993

Defined Benefits Plans Outside the U.S.

The Company also provides a non-contributory defined benefit plan which cover employees in Taiwan ("Taiwan Plan"). Any other benefit plans outside of the U.S. are not material to the Company either individually or in the aggregate.

The funded status of the Taiwan non-contributory defined benefit pension plans is as follows (in thousands):

	Years Ended December 31,	
	2015	2014
Change in Projected Benefit Obligation:		
Projected benefit obligation at beginning of year	$ 35,541	$ 33,933
Service cost	738	751
Interest cost	661	599
Actuarial loss	708	1,101
Benefit payments	(1,276)	(843)
Projected benefit obligation at end of year	$ 36,372	$ 35,541
Change in Plan Assets:		
Fair value of plan assets at beginning of year	$ 8,923	$ 8,302
Actual return on plan assets	236	190
Company contributions	1,273	1,274
Expenses and benefits paid from plan assets	(1,200)	(843)
Fair value of plan assets at end of year	$ 9,232	$ 8,923
Funded Status:		
Funded status of plan	$ (27,140)	$ (26,618)
Unrecognized actuarial (gain) loss	(4,320)	(4,036)
Net amount recognized	$ (31,460)	$ (30,654)

Amounts recognized in the statement of financial position consist of (in thousands):

	Years Ended December 31,	
	2015	2014
Noncurrent liabilities	$ (27,140)	$ (26,618)
Accumulated other comprehensive income	(4,320)	(4,036)
Total	$ (31,460)	$ (30,654)

Other changes in plan assets and benefit obligations recognized in other comprehensive income (loss) are as follows (in thousands):

	Years Ended December 31,		
	2015	2014	2013
Net loss (gain)	$ 813	$1,077	$(3,107)
Amortization of net gain (loss)	(529)	(464)	(808)
Total recognized in other comprehensive income (loss)	$ 284	$ 613	$(3,915)

Information for defined benefit plans with accumulated benefit obligations in excess of plan assets is as follows (in thousands):

	December 31, 2015	December 31, 2014
Accumulated benefit obligation	$26,966	$25,758
Projected benefit obligation	$36,372	$35,541
Plan assets	$ 9,232	$ 8,923

Net periodic pension cost for 2015, 2014 and 2013 for pension and supplemental benefit plans includes the following components (in thousands):

	2015	2014	2013
Service cost	$ 738	$ 751	$ 999
Interest cost	661	599	698
Return on assets (expected)	(176)	(166)	(163)
Amortization of net actuarial loss	529	464	808
Net periodic pension cost	$1,752	$1,648	$2,342

As of December 31, 2015, the expected benefit payments related to the Company's Taiwan defined benefit pension plans during the next ten years are as follows (in thousands):

2016	$ 1,746
2017	1,794
2018	2,528
2019	2,112
2020	2,445
2021 — 2025	13,182

Key assumptions used in the valuation of the Taiwan Plan are as follows:

	2015	2014	2013
Assumed discount rate for obligations	1.70%	1.90%	1.80%
Assumed discount rate for expense	1.90%	1.80%	1.80%
Rate of compensation increase for indirect labor	4.00%	4.50%	4.50%
Rate of compensation increase for direct labor	2.00%	2.00%	2.00%
Expected long-term rate of return on plan assets (1)	2.00%	2.00%	2.00%

(1) Asset allocation is 100% in money market investments

ARRIS estimates it will make funding contributions of $10.4 million in 2016.

Other Benefit Plans

ARRIS has established defined contribution plans pursuant to the Internal Revenue Code Section 401(k) that cover all eligible U.S. employees. ARRIS contributes to these plans based upon the dollar amount of each participant's contribution. ARRIS made matching contributions to these plans of approximately $16.6 million, $15.3 million and $10.9 million in 2015, 2014 and 2013, respectively.

The Company has a deferred compensation plan that does not qualify under Section 401(k) of the Internal Revenue Code, and is available to key executives of the Company and certain other employees. Employee compensation deferrals and matching contributions are held in a rabbi trust. The total of net employee deferrals and matching contributions, which is reflected in other long-term liabilities, was $3.6 million and $3.3 million at December 31, 2015 and 2014, respectively. Total expenses included in continuing operations for the matching contributions were approximately $0.1 million in 2015 and 2014.

The Company previously offered a deferred compensation arrangement, which allowed certain employees to defer a portion of their earnings and defer the related income taxes. As of December 31, 2004, the plan was frozen and no further contributions are allowed. The deferred earnings are invested in a rabbi trust. The total of net employee deferral and matching contributions, which is reflected in other long-term liabilities, was $2.8 million and $2.9 million at December 31, 2015 and 2014, respectively.

The Company also has a deferred retirement salary plan, which was limited to certain current or former officers of C-COR. The present value of the estimated future retirement benefit payments is being accrued over the estimated service period from the date of signed agreements with the employees. The accrued balance of this plan, the majority of which is included in other long-term liabilities, were $1.7 million and $1.8 million at December 31, 2015 and 2014, respectively. Total expenses (income) included in continuing operations for the deferred retirement salary plan were approximately $0.3 million and $0.1 million for 2015 and 2014, respectively.

Note 19. Accumulated Other Comprehensive Income (Loss)

The following table summarizes the changes in accumulated other comprehensive income (loss) by component, net of taxes, for the years ended December 31, 2015 and 2014 (in thousands):

	Available-for sale securities	Derivative instruments	Change related to pension liability	Cumulative translation adjustments	Total
Balance as of December 31, 2014	$ 25	$ (3,166)	$(7,181)	$ (725)	$(11,047)
Other comprehensive (loss) income before reclassifications	(64)	(8,319)	2,044	(1,078)	(7,417)
Amounts reclassified from accumulated other comprehensive income (loss)	172	4,704	942	—	5,818
Net current-period other comprehensive income (loss)	108	(3,615)	2,986	(1,078)	(1,599)
Balance as of December 31, 2015	$ 133	$ (6,781)	$(4,195)	$ (1,803)	$(12,646)

	Available-for sale securities	Derivative instruments	Change related to pension liability	Cumulative translation adjustments	Total
Balance as of December 31, 2013	$ 306	$ (2,541)	$(2,416)	$ (11)	$ (4,662)
Other comprehensive (loss) income before reclassifications	(127)	(5,391)	(5,273)	(714)	(11,505)
Amounts reclassified from accumulated other comprehensive income (loss)	(154)	4,766	508	—	5,120
Net current-period other comprehensive income (loss)	(281)	(625)	(4,765)	(714)	(6,385)
Balance as of December 31, 2014	$ 25	$ (3,166)	$(7,181)	$ (725)	$(11,047)

Note 20. Repurchases of Stock

The Company's Board of Directors previously authorized share repurchase plans, in May 2011 and October 2012, pursuant to which we could purchase up to an aggregate of $300.0 million of our common stock.

During the first quarter of 2015, ARRIS repurchased 0.9 million shares of the Company's common stock at an average price of $28.70 per share, for an aggregate consideration of approximately $25.0 million.

Note 21. Commitments and Contingencies

General Matters

ARRIS leases office, distribution, and warehouse facilities as well as equipment under long-term leases expiring at various dates through 2023. Included in these operating leases are certain amounts related to restructuring activities; these lease payments and related sublease income are included in restructuring accruals on the consolidated balance sheets. Future minimum operating lease payments under non-cancelable leases at December 31, 2015 were as follows (in thousands):

	Operating Leases
2016	$ 26,241
2017	20,180
2018	15,409
2019	11,592
2020	9,937
Thereafter	35,873
Less sublease income	(1,287)
Total minimum lease payments	$ 117,945

Total rental expense for all operating leases amounted to approximately $26.9 million, $32.0 million and $22.5 million for the years ended December 31, 2015, 2014 and 2013, respectively.

Additionally, the Company had contractual obligations of approximately $405.8 million under agreements with non-cancelable terms to purchase goods or services over the next year. All contractual obligations outstanding at the end of prior years were satisfied within a 12 month period, and the obligations outstanding as of December 31, 2015 are expected to be satisfied by 2016.

Bank Guarantees

The Company has outstanding bank guarantees, of which certain amounts are collateralized by restricted cash. As of December 31, 2015, the restricted cash associated with the outstanding bank guarantee was $0.8 million which is reflected in Other Assets on the Consolidated Balance Sheets.

Legal Proceedings

The Company accrues a liability for legal contingencies when it believes that it is both probable that a liability has been incurred and that it can reasonably estimate the amount of the loss. The Company reviews these accruals and adjusts them to reflect ongoing negotiations, settlements, rulings, advice of legal counsel and other relevant information. To the extent new information is obtained and the Company's views on the probable outcomes of claims, suits, assessments, investigations or legal proceedings change, changes in the Company's accrued liabilities would be recorded in the period in which such determinations are made. Unless noted otherwise, the amount of liability is not probable or the amount cannot be reasonably estimated; and, therefore, accruals have not been made.

Due to the nature of the Company's business, it is subject to patent infringement claims, including current suits against it or one or more of its wholly-owned subsidiaries, or one or more of our customers who may seek indemnification from us, alleging infringement by various Company products and services. The Company believes that it has meritorious defenses to the allegation made in its pending cases and intends to vigorously defend these lawsuits; however, it is currently unable to determine the ultimate outcome of these or similar matters. Accordingly, with respect to these proceedings, we are currently unable to reasonably estimate the possible loss or range of possible losses. In addition, the Company is a defendant in various litigation matters generally arising out of the normal course of business.

Note 22. Subsequent Events

Acquisition of Pace

On January 4, 2016, ARRIS completed its acquisition of Pace, a leading technology solutions provider incorporated in England and Wales, for approximately $2,073 million, including $638.8 million in cash and issuance of 47.7 million shares of ARRIS International plc (formerly ARRIS International Limited) ("New ARRIS") ordinary shares (the "Combination").

In connection with the Combination, (i) New ARRIS, a company incorporated in England and Wales and wholly-owned subsidiary of ARRIS Group, agreed to acquire all of the outstanding ordinary shares of Pace by means of court-sanctioned scheme of arrangement (the "Scheme") under English law and (ii) ARRIS entered into a Merger Agreement (the "Merger Agreement"), dated April 22, 2015, among ARRIS, New ARRIS, ARRIS US Holdings, Inc. (formerly Archie U.S. Holdings LLC), a Delaware corporation and wholly-owned subsidiary of New ARRIS ("US Holdco") and Archie U.S. Merger LLC, a Delaware limited liability company and wholly-owned subsidiary of US Holdco ("Merger Sub"), whereby Merger Sub would be merged with and into ARRIS, with ARRIS surviving as an indirect wholly-owned subsidiary of New ARRIS.

The Combination combines the strengths of both companies on a global scale—broadening ARRIS's worldwide CPE leadership with a competitive stake in satellite communications; leveraging new synergies in telco TV; expanding its cloud, network, home, and services portfolio; and increasing its collaboration with the world's leading service providers. In addition to CPE, the Combination further establishes ARRIS as a global leader in HFC/Optics, complementing its established CMTS leadership position.

The following table summarizes the fair value of consideration transferred for Pace (in thousands):

Cash Consideration (1)	$ 638,790
Stock Consideration (2)	1,434,690
Total consideration transferred	$ 2,073,480

(1) Cash consideration represents the cash payment of 132.5 pence (converted to $1.95 at an exchange rate of 1.4707) for each of Pace's shares and equity awards outstanding.

(2) Stock consideration represents the conversion of each of Pace's shares and equity awards outstanding at a conversion rate of 0.1455 with a value of $30.08 at January 4, 2016, which represents the opening price of the Company's common stock at the date of Combination.

The following is a summary of the preliminary estimated fair values of the net assets acquired (in thousands):

Total estimated consideration transferred	$2,073,480
Cash and cash equivalents	298,671
Accounts and other receivables	546,159
Inventories	490,925
Prepaids	21,599
Property, plant and equipment	98,371
Intangible assets	1,100,000
Noncurrent deferred income tax assets	27,635
Other assets	6,704
Accounts payable and other current liabilities	(754,838)
Deferred revenue	(24,743)
Short-term borrowings	(263,795)
Current income taxes liability	(7,801)
Other accrued liabilities	(129,915)
Other noncurrent liabilities	(427,831)
Net assets acquired	981,141
Goodwill	$1,092,339

The Combination will be accounted for using the acquisition method of accounting in accordance with ASC 805, *Business Combinations*, which requires, among other things, that the assets acquired and liabilities assumed be recognized at their acquisition date fair values, with any excess of the consideration transferred over the estimated fair values of the identifiable net assets acquired recorded as goodwill. The Company is in the process of valuing the net assets acquired based on physical appraisals, discounted cash flows analysis or other appropriate valuation techniques to determine the fair value of the assets acquired and liabilities assumed. The final accounting for the business combination may differ from that disclosed in these consolidated financial statements.

The estimated goodwill of $1,092 million arising from the acquisition is attributable to the workforce of the acquired business, strategic opportunities and synergies that are expected to arise from the acquisition of Pace. The goodwill will be assigned to both of the Company's reportable segments. The goodwill is not expected to be deductible for income tax purposes.

The Company incurred acquisition related costs of $25.8 million, during the fiscal year ended December 31, 2015. This amount was expensed by the Company as incurred and is included in the Consolidated Statement of Operations in the line item titled "Acquisition costs".

To fund the Combination, the Company added a new $800 million "Term Loan A-1 Facility" to the existing senior secured credit facilities with Bank of America, N.A. and various other institutions in June 2015, which was funded on January 5, 2016 in conjunction with the Combination. Refer to Note 14 *Indebtedness* of Notes to the Consolidated Financial Statements for more information.

Share Repurchase Program

In early 2016, the ARRIS International plc's Board of Directors approved a new $300 million share repurchase authorization replacing all prior programs. Unless terminated earlier by a Board resolution, this new plan will expire when ARRIS has used all authorized funds for repurchase.

Note 23. Summary Quarterly Consolidated Financial Information (unaudited)

The following table summarizes ARRIS's quarterly consolidated financial information (in thousands, except per share data):

	Quarters in 2015 Ended			
	March 31,	June 30,	September 30, (1)	December 31, (2)
Net sales	$1,215,158	$1,260,077	$1,221,416	$1,101,681
Gross margin	336,556	364,361	359,333	358,673
Operating income	45,718	51,542	60,781	52,912
Net income attributable to ARRIS Group, Inc.	$ 19,126	$ 16,758	$ 26,256	$ 30,041
Net income per basic share	$ 0.13	$ 0.11	$ 0.18	$ 0.20
Net income per diluted share	$ 0.13	$ 0.11	$ 0.18	$ 0.20

	Quarters in 2014 Ended			
	March 31, (3)	June 30,	September 30, (4)	December 31, (5)
Net sales	$1,225,017	$1,429,071	$1,405,445	$1,263,388
Gross margin	346,774	419,412	435,734	380,576
Operating income	37,986	91,676	122,109	89,563
Net income attributable to ARRIS Group, Inc.	$ 40,800	$ 39,024	$ 54,626	$ 192,761
Net income per basic share	$ 0.29	$ 0.27	$ 0.38	$ 1.33
Net income per diluted share	$ 0.28	$ 0.26	$ 0.37	$ 1.29

Year 2015

(1) The Company recorded a tax benefit of $27.3 million primarily from the release of valuation allowances from deferred tax assets recorded for U.S. federal net operating losses arising from the acquisition of the Motorola Home business from Google. The Company also recorded a tax expense of $18.9 million on a gain recognition agreement for its Taiwanese entity, inclusive of a benefit of $18.9 million obtained from foreign tax credits generated by the transaction.

(2) $20.4 million of current tax benefit was recorded when the President signed legislation to approve the extension of the U.S. federal research and development tax credit permanently during Q4 of 2015.

Year 2014

(3) The Company recorded a tax benefit from the release of $18.2 million of valuation allowances from deferred tax assets recorded for U.S. federal net operating losses arising from the acquisition of the Motorola Home business from Google.

(4) The Company identified and corrected an immaterial error in the accounting for income taxes related to the prior year ended December 31, 2013. The correction related to the Company's subsequent consideration of certain tax consequences related to a legal entity and tax restructuring completed in the fourth quarter of 2013. The impact of adjusting these amounts had a non-cash effect, increasing income tax expense and noncurrent income tax liabilities by $9.8 million. In accordance with ASC Topic 250, *Accounting Changes and Error Corrections*, the Company evaluated the impact on its financial statements for the year ended December 31, 2013 and concluded that the results of operations for these periods were not materially misstated.

(5) The Company recorded a tax benefit from the release of $134.8 million of valuation allowances from deferred tax assets recorded for U.S. federal net operating losses and U.S. federal tax credits and $9.0 million of valuation allowances from deferred tax assets recorded for state net operating losses and state research and development tax credits arising from the acquisition of the Motorola Home business from Google. In addition, $18.1 million of current tax benefit was recorded when the President signed legislation to approve the extension of the U.S. federal research and development tax credit through December 31, 2014.

PART III

Item 10. *Directors, Executive Officers, and Corporate Governance*

Information relating to directors and officers of ARRIS, the Audit Committee of the board of directors and stockholder nominations for directors is set forth under the captions entitled “Election of Directors,” “Section 16(a) Beneficial Ownership Reporting Compliance,” and “Committees of the Board of Directors and Meeting Attendance” in the Company’s Proxy Statement for the Annual Meeting of Stockholders to be held in 2016 (the “Proxy Statement”) and is incorporated herein by reference. Certain information concerning the executive officers of the Company is set forth in Part I of this document under the caption entitled “Executive Officers of the Company”.

ARRIS’s code of ethics and financial code of ethics (applicable to our CEO, senior financial officers, and all finance, accounting, and legal managers) are available on our website at www.arris.com under Investor Relations, Corporate Governance. The website also will disclose whether there have been any amendments or waivers to the Code of Ethics and Financial Code of Ethics. ARRIS will provide copies of these documents in electronic or paper form upon request to Investor Relations, free of charge.

ARRIS’s board of directors has identified Doreen A. Toben, chairperson of the Audit Committee, as our audit committee financial expert, as defined by the SEC.

Item 11. *Executive Compensation*

Information regarding compensation of officers and directors of ARRIS is set forth under the captions entitled “Executive Compensation,” “Compensation of Directors,” “Employment Contracts and Termination of Employment and Change-In-Control Arrangements,” “Committees Composition and Meeting Attendance,” and “Compensation Committee Report” in the Proxy Statement and is incorporated herein by reference.

Item 12. *Security Ownership of Certain Beneficial Owners, Management and Related Stockholders Matters*

EQUITY COMPENSATION PLAN INFORMATION

The following table sets forth information concerning our ordinary shares that may be issued under all equity compensation plans as of December 31, 2015:

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (1)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in 1st Column) (2)
Equity compensation plans approved by security holders	7,109,179	—	12,768,393
Equity compensation plans not approved by security holders	—	—	—
Total	7,109,179	—	12,768,393

(1) The total number of securities to be issued upon exercise of outstanding options, warrants and rights consists of, upon vesting, restricted shares of 7,109,179.

(2) Represents securities available for future issuance under current plans. 10,399,122 stock options or 5,561,028 restricted shares are available under for issuance the ARRIS 2011 Stock Incentive Plan, as amended and restated (the “2011 Pan”). The 2011 Plan has been designed to allow for flexibility in the form of awards; awards denominated in shares of common stock other than stock options and stock appreciation

rights will be counted against the plan limit as 1.87 shares for every one share covered by such an award. 2,240,351 shares are available for issuance under the 2001 Employee Stock Purchase Plan, which is in compliance with Section 423 of the U.S. Internal Revenue Code. 125,325 shares are available for issuance under the BigBand Networks, Inc. 2007 Equity Incentive Plan.

Information regarding ownership of ARRIS ordinary shares is set forth under the captions entitled "Equity Compensation Plan Information," "Security Ownership of Management and Directors" and "Security Ownership of Principal Shareholders" in the Proxy Statement and is incorporated herein by reference.

Item 13. ***Certain Relationships, Related Transactions, and Director Independence***

Information regarding certain relationships, related transactions with ARRIS, and director independence is set forth under the captions entitled "Compensation of Directors," "Certain Relationships and Related Party Transactions," and "An Ordinary Proposal to Elect Directors" in the Proxy Statement and is incorporated herein by reference.

Item 14. ***Principal Accountant Fees and Services***

Information regarding principal accountant fees and services is set forth under the caption "Independent Registered Public Accounting Firm" in the Proxy Statement and is incorporated herein by reference.

PART IV

Item 15. ***Exhibits and Financial Statement Schedules***

(a) (1) Financial Statements

The following Consolidated Financial Statements of ARRIS International plc and Report of Ernst & Young LLP, Independent Registered Public Accounting Firm are filed as part of this Report.

	Page
Report of Independent Registered Public Accounting Firm	77
Consolidated Balance Sheets at December 31, 2015 and 2014	78
Consolidated Statements of Operations for the years ended December 31, 2015, 2014 and 2013	79
Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2015, 2014 and 2013	80
Consolidated Statements of Cash Flows for the years ended December 31, 2015, 2014 and 2013	81
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2015, 2014 and 2013	83
Notes to the Consolidated Financial Statements	84

(a) (2) Financial Statements Schedules

All schedules are omitted because they are not applicable or not required because this information is provided in the financial statements

(a) (3) Exhibit List

Each management contract or compensation plan required to be filed as an exhibit is identified by an asterisk (*).

Exhibit Number	Description of Exhibit	The filings referenced for incorporation by reference are ARRIS Group, Inc. (as processor registrant; file no. 000-31254) filings unless otherwise noted
3.1	Article of Association of ARRIS International plc	Filed herewith
4.1	Form of Certificate for Ordinary Shares	Filed herewith
4.2	Registration Rights Agreement with General Instrument Holdings, Inc.	April 18, 2013, Form 8-K, Exhibit 4.1
10.1(a)*	Amended and Restated Employment Agreement with Robert J. Stanzione, dated August 6, 2001	September 30, 2001 Form 10-Q, Exhibit 10.10(c)
10.1(b)*	Supplemental Executive Retirement Plan for Robert J. Stanzione, effective August 6, 2001	September 30, 2001 Form 10-Q, Exhibit 10.10(d)
10.1(c)*	Amendment to Employment Agreement with Robert J. Stanzione, dated December 8, 2006	December 12, 2006 Form 8-K, Exhibit 10.7
10.1(d)*	Second Amendment to Amended and Restated Employment Agreement with Robert J. Stanzione, dated November 26, 2008	November 28, 2008 Form 8-K, Exhibit 10.8
10.1(e)*	First Amendment to the Robert Stanzione Supplemental Executive Retirement Plan, dated November 26, 2008	November 28, 2008 Form 8-K, Exhibit 10.9
10.2(a)*	Amended and Restated Employment Agreement with Lawrence A. Margolis, dated April 29, 1999	June 30, 1999 Form 10-Q, Exhibit 10.33, filed by ANTEC Corp
10.2(b)*	Amendment to Employment Agreement with Lawrence Margolis, dated December 8, 2006	December 12, 2006 Form 8-K, Exhibit 10.6

Exhibit Number	Description of Exhibit	The filings referenced for incorporation by reference are ARRIS Group, Inc. (as processor registrant; file no. 000-31254) filings unless otherwise noted
10.2(c)*	Second Amendment to Amended and Restated Employment Agreement with Lawrence Margolis, dated November 26, 2008	November 28, 2008 Form 8-K, Exhibit 10.7
10.2(d)*	Third Amendment to Amended and Restated Employment Agreement with Lawrence Margolis, dated October 31, 2012….	September 30, 2012 Form 10-Q, Exhibit 10.1
10.3(a)*	Employment Agreement with David B. Potts dated December 8, 2006	December 12, 2006 Form 8-K, Exhibit 10.4
10.3(b)*	First Amendment to Employment Agreement with David B. Potts, dated November 26, 2008	November 28, 2008 Form 8-K, Exhibit 10.6
10.4(a)*	Employment Agreement with Ronald M. Coppock, dated December 8, 2006	December 12, 2006 Form 8-K, Exhibit 10.1
10.4(b)*	First Amendment to Employment Agreement with Ronald M. Coppock, dated November 26, 2008	November 28, 2008 Form 8-K, Exhibit 10.3
10.5*	Employment Agreement with Bruce McClelland, dated November 26, 2008	November 28, 2008 Form 8-K, Exhibit 10.2
10.6*	Deed Poll of Indemnity with Directors	January 4, 2016 Form 8-K of ARRIS International plc, Exhibit 10.1
10.7*	Form of Employment Agreement Waiver entered into with each Executive Officer as of January 3, 2014 (Pace Combination)	January 4, 2016 Form 8-K of ARRIS International plc, Exhibit 10.13
10.8*	Form of Opt Plan Waiver	January 4, 2016 Form 8-K of ARRIS International plc, Exhibit
10.9*	ARRIS International plc Amended and Restated Employee Stock Purchase Plan	January 4, 2016 Form 8-K of ARRIS International plc, Exhibit 10.2
10.10*	ARRIS International plc 2011 Stock Incentive Plan	January 4, 2016 Form 8-K of ARRIS International
10.11*	Broadband Parent Corporation 2001 Stock Incentive Plan	January 4, 2016 Form 8-K of ARRIS International plc, Exhibit 10.4
10.12*	ARRIS Group, Inc. 2004 Stock Incentive Plan	January 4, 2016 Form 8-K of ARRIS International plc, Exhibit 10.5
10.13*	ARRIS Group, Inc. 2007 Stock Incentive Plan	January 4, 2016 Form 8-K of ARRIS International plc, Exhibit 10.6
10.14*	ARRIS Group, Inc. 2008 Stock Incentive Plan	January 4, 2016 Form 8-K of ARRIS International plc, Exhibit 10.7
10.15*	BigBand Networks, Inc. 2007 Equity Incentive Plan	January 4, 2016 Form 8-K of ARRIS International plc, Exhibit 10.8
10.16*	Pace Sharesave Plan	January 4, 2016 Form 8-K of ARRIS International plc, Exhibit 10.9

Exhibit Number	Description of Exhibit	The filings referenced for incorporation by reference are ARRIS Group, Inc. (as precessor registrant; file no. 000-31254) filings unless otherwise noted
10.17*	Assumption Agreement for benefit plans (Pace Combination)	January 4, 2016 Form 8-K of ARRIS International plc, Exhibit 10.10
10.18*	Form of Deed of Grant for Pace Sharesave Plan	January 4, 2016 Form 8-K of ARRIS International plc, Exhibit 10.11
10.19*	Form of Stock Options Grant under 2001 and 2004 Stock Incentive Plans	March 31, 2005 Form 10-Q, Exhibit 10.20
10.20*	Form of Restricted Stock Grant under 2001 and 2004 Stock Incentive Plans	March 31, 2005 Form 10-Q, Exhibit 10.21
10.21*	Form of Incentive Stock Option Agreement	September 30, 2007, Form 10-Q Exhibit 10.1
10.22*	Form of Nonqualified Stock Option Agreement	September 30, 2007, Form 10-Q Exhibit 10.2
10.23*	Form of Restricted Stock Award Agreement	September 30, 2007, Form 10-Q Exhibit 10.3
10.24*	Form of Nonqualified Stock Options Agreement	April 11, 2008, Form 8-K Exhibit 10.1
10.25*	Form of Restricted Stock Grant	April 11, 2008, Form 8-K Exhibit 10.2
10.26*	Form of Restricted Stock Unit Grant	April 11, 2008, Form 8-K Exhibit 10.3
10.27*	Form of Restricted Stock Agreement	March 31, 2009, Form 10-Q, Exhibit 10.24
10.28*	Form of Restricted Stock Unit	March 31, 2009, Form 10-Q, Exhibit 10.24
10.29*	Assumption Agreement for Benefit Plans (Motorola Home acquisition)	April 16, 2013, Form 8-K, Exhibit 10.1
10.30*	Form of Restricted Stock Grant Award Agreement under 2011 Stock Incentive Plan	April 16, 2013, Form 8-K, Exhibit 10.3
10.31*	Form of Change of Control Waiver (Motorola Home acquisition)	April 16, 2013, Form 8-K, Exhibit 10.4
10.32	Amended and Restated 2013 Credit Agreement	June 19, 2015, Form 8-K, Exhibit 10.1
21	Subsidiaries of the Registrant	Filed herewith.
23	Consent of Independent Registered Public Accounting Firm	Filed herewith.
24	Powers of Attorney	Filed herewith.
31.1	Section 302 Certification of the Chief Executive Officer	Filed herewith.

Exhibit Number	Description of Exhibit	The filings referenced for incorporation by reference are ARRIS Group, Inc. (as precessor registrant; file no. 000-31254) filings unless otherwise noted
31.2	Section 302 Certification of the Chief Financial Officer	Filed herewith.
32.1	Section 906 Certification of the Chief Executive Officer	Filed herewith.
32.2	Section 906 Certification of the Chief Financial Officer	Filed herewith.
101.INS	XBRL Instant Document	Filed herewith
101.SCH	XBRL Taxonomy Extension Schema Document	Filed herewith
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	Filed herewith
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	Filed herewith
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document	Filed herewith
101. PRE	XBRL Taxonomy Extension Presentation Linkbase Document	Filed herewith

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ARRIS INTERNATIONAL PLC

/s/ DAVID B. POTTS
David B. Potts
Executive Vice President,
Chief Financial Officer and
Chief Accounting Officer

Dated: February 29, 2016

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

/s/ R J STANZIONE Robert J. Stanzione	Chief Executive Officer and Chairman of the Board of Directors	February 29, 2016
/s/ DAVID B. POTTS David B. Potts	Executive Vice President, Chief Financial Officer and Chief Accounting Officer	February 29, 2016
/s/ ALEX B. BEST* Alex B. Best	Director	February 29, 2016
/s/ HARRY L. BOSCO* Harry L. Bosco	Director	February 29, 2016
/s/ J. TIMOTHY BRYAN J. Timothy Bryan	Director	February 29, 2016
/s/ JAMES A. CHIDDIX* James A. Chiddix	Director	February 29, 2016
/s/ ANDREW T. HELLER* Andrew T. Heller	Director	February 29, 2016
/s/ JEONG H. KIM* Jeong H. Kim	Director	February 29, 2016
/s/ DOREEN A. TOBEN* Doreen A. Toben	Director	February 29, 2016
/s/ DEBORA J. WILSON* Debora J. Wilson	Director	February 29, 2016
/s/ DAVID A. WOODLE* David A. Woodle	Director	February 29, 2016
*By: /s/ PATRICK W. MACKEN Patrick W. Macken (as attorney in fact for each person indicated)		

Exhibit 3.1

Company No: 09551763

ARRIS INTERNATIONAL PLC

ARTICLES OF ASSOCIATION

(Adopted by Special Resolution passed on 29 December 2015)

Herbert Smith Freehills LLP

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ARTICLES OF ASSOCIATION

of

ARRIS INTERNATIONAL PLC
(the "Company")

(adopted by special resolution passed on 29 December 2015)

1. DEFINITIONS AND INTERPRETATION

1.1 Definitions

In these articles the following words bear the following meanings:

"Acts" means the Companies Acts (as defined in section 2 of the Companies Act 2006), in so far as they apply to the Company;

"acting in concert" has the meaning given to it in the Takeover Code;

"articles" means the articles of association of the Company;

"board" or **"board of directors"** means the directors or any of them duly acting as the board of the Company;

"clear days" means in relation to the period of a notice, that period excluding the day when the notice is given or deemed to be given and the day for which it is given or on which it is to take effect;

"Depositary" means any depositary, clearing agency, custodian, nominee or similar entity appointed under arrangements entered into by the Company or otherwise approved by the board that holds, or is interested directly or indirectly, including through a nominee, in, shares, or rights or interests in respect thereof, and which issues certificates, instruments, securities or other documents of title, or maintains accounts, evidencing or recording the entitlement of the holders thereof, or account holders, to or to receive such shares, rights or interests (and shall include, where so approved by the board, the trustees (acting in their capacity as such) of any employees' share scheme established by the Company);

"director" means a director of the Company;

"electronic address" means any number or address used for the purposes of sending or receiving notices, documents or information by electronic means;

"electronic form" has the same meaning as in the Acts;

"electronic means" has the same meaning as in the Acts;

"Exchange Act" means the Securities Exchange Act of 1934, as amended from time to time;

"executed" means any mode of execution;

"holder" means in relation to shares, the member whose name is entered in the register of members as the holder of the shares;

"Office" means the registered office of the Company;

"seal" means the common seal (if any) of the Company and an official seal (if any) kept by the Company by virtue of section 50 of the Companies Act 2006, or either of them as the case may require;

"secretary" means the secretary of the Company or any other person appointed to perform the duties of the secretary of the Company, including a joint, assistant or deputy secretary;

"share" means a share in the capital of the Company;

"Takeover Code" means the City Code on Takeover and Mergers;

"Uncertificated Securities Regulations" means the Uncertificated Securities Regulations 2001; and

"US$" means the lawful currency of the United States.

1.2 In these articles, references to a share being in uncertificated form are references to that share being an uncertificated unit of a security and references to a share being in certificated form are references to that share being a certificated unit of a security, provided that any reference to a share in uncertificated form applies only to a share of a class which is, for the time being, a participating security, and only for so long as it remains a participating security.

1.3 Save as aforesaid and unless the context otherwise requires, words or expressions contained in these articles have the same meaning as in the Acts or the Uncertificated Securities Regulations (as the case may be).

1.4 Except where otherwise expressly stated, a reference in these articles to any primary or delegated legislation or legislative provision includes a reference to any modification or re-enactment of it for the time being in force.

1.5 In these articles, unless the context otherwise requires:

1.5.1 words in the singular include the plural, and vice versa;

1.5.2 words importing any gender include all genders; and

1.5.3 a reference to a person includes a reference to a body corporate and to an unincorporated body of persons.

1.6 In these articles:

1.6.1 references to writing include references to typewriting, printing, lithography, photography and any other modes of representing or reproducing words in a legible and non-transitory form, whether sent or supplied in electronic form or made available on a website or otherwise;

1.6.2 the words and phrases "other", "otherwise", "including" and "in particular" shall not limit the generality of any preceding words or be construed as being limited to the same class as the preceding words where a wider construction is possible; and

1.6.3 references to a power are to a power of any kind, whether administrative, discretionary or otherwise.

1.7 The headings are inserted for convenience only and do not affect the construction of these articles.

2. EXCLUSION OF OTHER REGULATIONS

No regulations or model articles contained in any statute or subordinate legislation including without prejudice to such generality, the regulations contained in Table A to the Companies Act 1948, Table A to the Companies Act 1985 and the Companies (Model Articles) Regulations 2008 shall apply as the articles of the Company.

SHARE CAPITAL

3. LIABILITY OF MEMBERS

The liability of the members is limited to the amount, if any, unpaid on the shares held by them.

4. FURTHER ISSUES AND RIGHTS ATTACHING TO SHARES ON ISSUE

4.1 Without prejudice to any rights attached to any existing shares, any share may be issued with such rights or restrictions as the Company may by ordinary resolution determine or, if the Company has not so determined, as the directors may determine.

4.2 In the event that rights and restrictions attaching to shares are determined by ordinary resolution or by the directors pursuant to this article 4, those rights and restrictions shall apply, in particular in place of any rights or restrictions that would otherwise apply by virtue of the Acts in the absence of any provisions in the articles of a company, as if those rights and restrictions were set out in the articles.

Allotment Powers - Section 551 Authority

4.3 The directors shall be generally and unconditionally authorised pursuant to section 551 of the Companies Act 2006 to:

4.3.1 without prejudice to the authority referred to in article 4.3.2 below, allot shares in the Company, and to grant rights to subscribe for or to convert any security into shares in the Company, up to an aggregate par amount of £3,252,898.20, for a period expiring (unless previously renewed by the Company in a general meeting) on the date which is five years from the date of the adoption of these articles by the Company, provided that in utilising the authority contained in this article 4.3.1, the directors do not exceed the limits provided for in NASDAQ rules;

4.3.2 in addition to the authority referred to in article 4.3.1 above, allot shares in the Company, and to grant rights to subscribe for or to convert any security into shares in the Company, in connection with a “Rights Plan” as referred to in article 5, up to an aggregate par amount of £3,903,477.84, for a period expiring (unless previously renewed by the Company in a general meeting) on the date which is five years from the date of the adoption of these articles by the Company; and

4.3.3 make an offer or agreement which would or might require shares to be allotted, or rights to subscribe for or convert any security into shares to be granted, after expiry of an authority described in this article 4.3 and the directors may allot shares and grant rights in pursuance of that offer or agreement as if this authority had not expired.

Allotment Powers – Section 561 Authority

4.4 The directors shall be generally empowered pursuant to section 570 and section 573 of the Companies Act 2006 to allot equity securities (as defined in the Acts) for cash, pursuant to the authorities conferred by article 4.3 as if section 561(1) of the Companies Act 2006 did not apply to the allotment. This power:

4.4.1 expires (unless previously renewed by the Company in a general meeting) on the date which is five years from the date of the adoption of these articles by the Company, but the Company may make an offer or agreement which would or might require equity securities to be allotted after expiry of this power and the directors may allot equity securities in pursuance of that offer or agreement as if this power had not expired;

4.4.2 shall be limited to the allotment of equity securities:

(A) without prejudice to the authority referred to in article 4.4.2(B) below, up to an aggregate par amount of £3,252,898.20; and

(B) in connection with a “Rights Plan” as referred to in article 5, up to an aggregate par amount of £3,903,477.84, in addition to the authority referred to in article 4.4.2(A) above.

This article 4.4 applies in relation to a sale of shares which is an allotment of equity securities by virtue of section 560(3) of the Acts as if in the first paragraph of the words “pursuant to the authorities conferred by article 4.3” were omitted.

Residual Allotment Powers

4.5 Subject to the provisions of the Acts relating to authority, pre-emption rights or otherwise and of any resolution of the Company in general meeting passed pursuant to those provisions, and, in the case of redeemable shares, the provisions of article 6:

4.5.1 all shares for the time being in the capital of the Company shall be at the disposal of the board; and

4.5.2 the board may reclassify, allot (with or without conferring a right of renunciation), grant options over, or otherwise dispose of them to such persons on such terms and conditions and at such times as it thinks fit.

5. RIGHTS PLAN

5.1 Subject to the provisions of the Acts, the board may exercise any power of the Company to establish a shareholders rights plan (the **"Rights Plan"**) including approving the execution of any document relating to the adoption or implementation (or both) of the Rights Plan. The Rights Plan may be in such form as the board shall in its absolute discretion decide and may in particular (but without restriction or limitation) include such terms as are described in the Summary of Example Terms in the form appearing in the Appendix to these articles.

5.2 Subject to the provisions of the Acts, the board may exercise any power of the Company to grant rights to subscribe for the shares of the Company in accordance with the Rights Plan (the **"Rights"**).

5.3 The purposes for which the board shall be entitled to establish the Rights Plan and to grant Rights in accordance therewith, as provided in articles 5.1 and 5.2 above, shall include (without limitation) the following where the board may decide to do so would improve the likelihood that:

5.3.1 any process which may result in an acquisition or change of Control (as defined in article 5.5 below) of the Company is conducted in an orderly manner;

5.3.2 all members of the Company will be treated equally and fairly and in a similar manner;

5.3.3 an optimum price for shares would be received by or on behalf of all members of the Company;

5.3.4 the success of the Company would be promoted for the benefit of its members as a whole;

5.3.5 the long term interests of the Company, its employees, its members and its business would be safeguarded;

5.3.6 the Company would not suffer serious economic harm; or

5.3.7 the board would have additional time to gather relevant information or pursue appropriate strategies,

or all or any of the above.

5.4 Subject to the provisions of the Acts, the board may determine not to redeem the Rights and accordingly exercise any power of the Company to (a) allot shares of the Company pursuant to the exercise of the Rights or (b) exchange or cause to be exchanged all or part of the Rights (in each case other than Rights held by an Acquiring Person) for shares or another class or series of shares or all or any of them (an **"Exchange"**) in each case in accordance with the Rights Plan. The purposes for which the board shall be entitled not to redeem the Rights, and accordingly to exercise any power of the Company to allot shares of the Company or effect an Exchange, shall include (without limitation) the following where, the board may decide to do so, would improve the likelihood that:

5.4.1 the use of abusive tactics by any person in connection with any potential acquisition or change of Control of the Company would be prevented;

5.4.2 any potential acquisition or change of Control of the Company which would be unlikely to treat all members of the Company equally and fairly and in a similar manner would be prevented;

5.4.3 any potential acquisition or change of Control of the Company at a price which would undervalue the Company or its shares would be prevented;

5.4.4 any potential acquisition or change of Control of the Company which would not be likely to promote the success of the Company for the benefit of its members as a whole, having had regard to the matters in section 172 of the Companies Act 2006, would be prevented;

5.4.5 the long term interests of the Company or its members, employees and its business would be safeguarded or both; or

5.4.6 the Company would not suffer serious economic harm,

or all or any of the above.

5.5 For the purposes of this article 5 a person (an **"Acquiring Person"**) shall be deemed to have control (**"Control"**) of the Company if he, either alone or with: (a) any group of affiliated or associated persons; or (b) anyone with whom he is acting in concert; or (c) both, exercises, or is able to exercise or is entitled to acquire, the direct or indirect power to direct or cause the direction of the management and policies of the Company, whether through the ownership of voting securities, by contract or otherwise, and in particular, but without prejudice to the generality of the preceding words, if he, either alone or with: (i) any group of affiliated or associated persons; or (ii) anyone with whom he is acting in concert; or (iii) both, possesses or is entitled to acquire:

5.5.1 interests in shares carrying 20 per cent. or more of the voting rights attributable to the capital of the Company which are exercisable at a general meeting;

5.5.2 such percentage of the issued share capital of the Company as would, if the whole of the income or assets of the Company were in fact distributed among the members (without regard to any rights which he or any other person has as a loan creditor) entitle him to receive 20 per cent. or more of the income or assets so distributed; or

5.5.3 such rights as would, in the event of the winding-up of the Company or in any other circumstances, entitle him to receive 20 per cent. or more of the assets of the Company which would then be available for distribution among the members.

5.6 For the purposes of this article 5:

5.6.1 **"person"** shall include any individual, firm, body corporate, unincorporated association, government, state or agency of state, association, joint venture or partnership, in each case whether or not having a separate legal personality and "group of affiliated or associated persons" shall have the meaning given to such terms under the United States federal securities laws, including the Exchange Act;

5.6.2 a person shall be treated as entitled to acquire anything which he is entitled to acquire at a future date, or will at a future date be entitled to acquire, irrespective of whether such future acquisition is contingent upon satisfaction of any conditions precedent;

5.6.3 rights, powers and interests in shares held by a person in his capacity as a nominee or Depositary shall be treated as being held by the person on whose behalf they are held and not by the person holding them as nominee or Depositary; and

5.6.4 there shall be attributed to any person any rights or powers which another person may be required to exercise at his discretion or on his behalf.

6. REDEEMABLE SHARES

6.1 Any share may be issued which is or is to be liable to be redeemed at the option of the Company or the holder, and the directors may determine the terms, conditions and manner of redemption of any such share.

6.2 In the event that rights and restrictions attaching to shares are determined by the directors pursuant to this article 6, those rights and restrictions shall apply, in particular in place of any rights or restrictions that would otherwise apply by virtue of the Acts in the absence of any provisions in the articles of a company, as if those rights and restrictions were set out in the articles.

7. **PAYMENT OF COMMISSIONS**

The Company may exercise the powers of paying commissions conferred by the Acts. Any such commission may be satisfied by the payment of cash or by the allotment of fully or partly paid shares, or partly in one way and partly in the other and may be in respect of a conditional or an absolute subscription.

8. **TRUSTS NOT RECOGNISED**

Except as required by law, no person shall be recognised by the Company as holding any share upon any trust. Except as otherwise provided by these articles or by law, the Company shall not be bound by or recognise (even if having notice of it) any equitable, contingent, future, partial or other claim or any interest in any share other than the holder's absolute ownership of it and all the rights attaching to it.

9. **UNCERTIFICATED SHARES**

9.1 Without prejudice to any powers which the Company or the directors may have to issue, allot, dispose of, convert, or otherwise deal with or make arrangements in relation to shares and other securities in any form:

9.1.1 the holding of shares in uncertificated form and the transfer of title to such shares by means of a relevant system shall be permitted; and

9.1.2 the Company may issue shares in uncertificated form and may convert shares from certificated form to uncertificated form and vice versa.

9.2 If and to the extent that any provision of these articles is inconsistent with such holding or transfer as is referred to in article 9.1.1 or with any provision of the Uncertificated Securities Regulations, it shall not apply to any share in uncertificated form.

10. **SEPARATE HOLDINGS OF SHARES IN CERTIFICATED AND UNCERTIFICATED FORM**

Notwithstanding anything else contained in these articles, where any class of shares is, for the time being, a participating security, unless the directors otherwise determine, shares of any such class held by the same holder or joint holder in certificated form and uncertificated form shall be treated as separate holdings.

VARIATION OF RIGHTS

11. **VARIATION OF RIGHTS**

11.1 If at any time the capital of the Company is divided into different classes of shares, the rights attached to any class may be varied, either while the Company is a going concern or during or in contemplation of a winding up:

11.1.1 in such manner (if any) as may be provided by those rights; or

11.1.2 in the absence of any such provision, with the consent in writing of the holders of three-quarters in nominal value of the issued shares of that class (excluding any shares of that class held as treasury shares), or with the sanction of a special resolution passed at a separate meeting of the holders of the shares of that class,

but not otherwise. To every such separate meeting the provisions of these articles relating to general meetings shall apply, except that the necessary quorum shall be (i) at any such meeting other than an adjourned meeting, two persons entitled to vote upon the business to be transacted in respect of a majority in nominal value of the issued shares of the class in question (excluding any shares of that class held as treasury shares), each being a member or a proxy for a member or a duly authorised representative of a corporation which is a member (including for this purpose two persons who are proxies or corporate representatives of the same member); or (ii) at an adjourned meeting, one person holding shares of the class in question (other than treasury shares) or their proxy.

12. **RIGHTS DEEMED NOT VARIED**

Unless otherwise expressly provided by the rights attached to any class of shares, those rights shall be deemed not to be varied by the purchase by the Company of any of its own shares or the holding of such shares as treasury shares.

SHARE CERTIFICATES

13. **RIGHTS TO SHARE CERTIFICATES**

13.1 On becoming the holder of any share other than a share in uncertificated form, every person (other than a financial institution in respect of whom the Company is not required by law to complete and have ready a certificate) shall be entitled, without payment, to have issued to him within two months after allotment or lodgement of a transfer (unless the terms of issue of the shares provide otherwise) one certificate for all the shares of each class registered in his name or, upon payment for every certificate after the first of such reasonable sum as the directors may determine, several certificates each for one or more of his shares.

13.2 Every certificate shall be issued under the seal or under such other form of authentication as the directors may determine (which may include manual or facsimile signatures by one or more directors), and shall specify the number, class and distinguishing numbers (if any) of the shares to which it relates and the amount or respective amounts paid up on them.

13.3 Where a member (other than a financial institution) has transferred part only of the shares comprised in a certificate, the member is entitled, without payment, to have issued to him a certificate in respect of the balance of shares held by him or, upon payment for every certificate after the first of such reasonable sum as the directors may determine, several certificates each for one or more of his shares.

13.4 When a member's (other than a financial institution's) holding of shares of a particular class increases, the Company may issue that member with a single, consolidated certificate in respect of all the shares of a particular class which that member holds or a separate certificate in respect of only those shares by which that member's holding has increased.

13.5 A member (other than a financial institution) may request the Company, in writing, to replace the member's separate certificates with a consolidated certificate or the member's consolidated certificate with two or more separate certificates representing such proportion of the shares as the member may specify, provided that any certificate(s) which it is (or they are) to replace has first been returned to the Company for cancellation. When the Company complies with such a request it may charge such reasonable sum as the directors may determine for doing so.

13.6 The Company shall not be bound to issue more than one certificate for shares held jointly by several persons and delivery of a certificate to whichever of the joint holders' names appears first on the register of members in respect of the joint holding shall be a sufficient delivery to all of them.

13.7 If a certificate issued in respect of a member's shares is damaged or defaced or said to be lost, stolen or destroyed, then that member is entitled to be issued with a replacement certificate in respect of the same shares. A member exercising the right to be issued with such a replacement certificate:

13.7.1 must return the certificate which is to be replaced to the Company if it is damaged or defaced; and

13.7.2 must comply with such conditions as to evidence, indemnity and the payment of a reasonable fee as the directors may determine.

LIEN

14. **COMPANY'S LIEN ON SHARES NOT FULLY PAID**

The Company has a lien over every share which is partly paid for all amounts (whether presently payable or not) payable at a fixed time or called in respect of that share. The directors may declare any share to be wholly or in part exempt from the provisions of this article 14. The Company's lien over a share takes priority over any third party's interest in that share, and extends to any dividend or other money payable by the Company in respect of that share (and, if the lien is enforced and the share is sold by the Company, the proceeds of sale of that share).

15. **ENFORCING LIEN BY SALE**

The Company may sell, in such manner as the directors determine, any share on which the Company has a lien if an amount in respect of which the lien exists is presently payable and is not paid within 14 clear days after notice has been given to the holder of the share, or the person entitled to it in consequence of the death or bankruptcy of the holder or otherwise by operation of law, demanding payment and stating that if the notice is not complied with the shares may be sold.

16. **GIVING EFFECT TO A SALE**

16.1 To give effect to the sale described in article 15:

16.1.1 in the case of a share in certificated form, the directors may authorise any person to execute an instrument of transfer of the share to the purchaser or a person nominated by the purchaser;

16.1.2 in the case of a share in uncertificated form, the directors may:

(A) to enable the Company to deal with the share in accordance with the provisions of this article 16, require the Operator of a relevant system to convert the share into certificated form; and

(B) after such conversion, authorise any person to execute an instrument of transfer and take such other steps (including the giving of directions to or on behalf of the holder, who shall be bound by them) as they think fit to effect the transfer.

16.2 The title of the transferee to the share shall not be affected by any irregularity in or invalidity of the proceedings in reference to the sale.

17. **APPLICATION OF PROCEEDS OF SALE**

The net proceeds of the sale, after payment of the costs, shall be applied in payment of so much of the amount for which the lien exists as is presently payable. Any residue shall (upon surrender to the Company for cancellation of the certificate for the share sold, in the case of a share in certificated form, and subject to a like lien for any amount not presently payable as existed upon the share before the sale) be paid to the person entitled to the share at the date of the sale.

CALLS ON SHARES AND FORFEITURE

18. **CALLS**

18.1 Subject to the terms of allotment, the directors may make calls upon the members in respect of any amounts unpaid on their shares (whether in respect of nominal value or premium) and each member shall (subject to receiving at least 14 clear days' notice specifying when and where payment is to be made) pay to the Company as required by the notice the amount called on his shares. A call may be required to be paid by instalments. A call may, before receipt by the Company of an amount due under it, be revoked in whole or in part and payment of a call may be postponed in whole or part. A person upon whom a call is made shall remain liable for calls made upon him notwithstanding the subsequent transfer of the shares in respect of which the call was made.

18.2 A call shall be deemed to have been made at the time when the resolution of the directors authorising the call was passed.

19. **JOINT AND SEVERAL LIABILITY IN RESPECT OF CALLS**

The joint holders of a share shall be jointly and severally liable to pay all calls in respect of it.

20. **INTEREST**

If a call or an instalment of a call remains unpaid after it has become due and payable the person from whom it is due shall pay interest on the amount unpaid, from the day it became due and payable until it is paid at the rate fixed by the terms of allotment of the shares in question or fixed in the notice of the call or, if no rate is fixed, at the appropriate rate (as defined in the Acts). The directors may, however, waive payment of the interest wholly or in part.

21. **SUMS TREATED AS CALLS**

An amount payable in respect of a share on allotment or at any fixed date, whether in respect of nominal value or premium or as an instalment of a call, shall be deemed to be a call and if it is not paid these articles shall apply as if that sum had become due and payable by virtue of a call.

22. **POWER TO DIFFERENTIATE**

Subject to the terms of allotment, the directors may differentiate between the holders in the amounts and times of payment of calls on their shares.

23. **PAYMENT OF CALLS IN ADVANCE**

The directors may receive from any member willing to advance it all or any part of the amount unpaid on the shares held by him (beyond the sums actually called up) as a payment in advance of calls, and such payment shall, to the extent of it, extinguish the liability on the shares in respect of which it is advanced. The Company may pay interest on the amount so received, or so much of it as exceeds the sums called up on the shares in respect of which it has been received, at such rate (if any) as the member and the directors agree.

24. **NOTICE IF CALL NOT PAID AND FORFEITURE**

If a call or an instalment of a call remains unpaid after it has become due and payable the directors may give to the person from whom it is due not less than 14 clear days' notice requiring payment of the amount unpaid together with any interest which may have accrued. The notice shall name the place where payment is to be made and shall state that if the notice is not complied with the shares in respect of which the call was made will be liable to be forfeited. If the notice is not complied with, any shares in respect of which it was given may, before the payment required by the notice has been made, be forfeited by a resolution of the directors and the forfeiture shall include all dividends and other amounts payable in respect of the forfeited shares and not paid before the forfeiture.

25. **SALE OF FORFEITED SHARES**

25.1 A forfeited share may be sold, re-allotted or otherwise disposed of on such terms and in such manner as the directors determine either to the person who was before the forfeiture the holder (including a person who was entitled to the share in consequence of the death or bankruptcy of the holder or otherwise by operation of law) or to any other person and, at any time before the disposition, the forfeiture may be cancelled on such terms as the directors determine. Where for the purposes of its disposal a forfeited share is to be transferred to any person:

25.1.1 in the case of a share in certificated form, the directors may authorise any person to execute an instrument of transfer and take such other steps (including the giving of directions to or on behalf of the holder, who shall be bound by them) as they think fit to effect the transfer; and

25.1.2 in the case of a share in uncertificated form, the directors may:

(A) to enable the Company to deal with the share in accordance with the provisions of this article 25, require the Operator of a relevant system to convert the share into certificated form; and

(B) after such conversion, authorise any person to execute an instrument of transfer and take such other steps (including the giving of directions to or on behalf of the holder, who shall be bound by them) as they think fit to effect the transfer.

26. **CESSATION OF MEMBERSHIP AND CONTINUING LIABILITY**

A person whose shares have been forfeited shall cease to be a member in respect of the shares forfeited and shall surrender to the Company for cancellation any certificate for the shares forfeited. However, such person shall remain liable to the Company for all amounts which at the date of forfeiture were presently payable by him to the Company in respect of those shares with interest at the rate at which interest was payable on those amounts before the forfeiture or, if no interest was so payable, at the appropriate rate (as defined in the Acts) from the date of forfeiture until payment. The directors may waive payment wholly or in part or enforce payment without any allowance for the value of the shares at the time of forfeiture or for any consideration received on their disposal.

27. **STATUTORY DECLARATION AS TO FORFEITURE**

A statutory declaration by a director or the secretary that a share has been forfeited on a specified date shall be conclusive evidence of the facts stated in it as against all persons claiming to be entitled to the share and the declaration shall (subject to the execution of an instrument of transfer if necessary, in the case of a share in certificated form) constitute good title to the share and the person to whom the share is disposed of shall not be bound to see to the application of the consideration, if any, nor shall his title to the share be affected by any irregularity in or invalidity of the proceedings relating to the forfeiture or disposal of the share.

TRANSFER OF SHARES

28. **TRANSFER OF SHARES IN CERTIFICATED FORM**

The instrument of transfer of a share in certificated form may be in any usual form or in any other form which the directors approve and shall be executed by or on behalf of the transferor and, where the share is not fully paid, by or on behalf of the transferee.

29. **TRANSFER OF SHARES IN UNCERTIFICATED FORM**

Where any class of shares is, for the time being, a participating security, title to shares of that class which are recorded on an Operator register of members as being held in uncertificated form may be transferred by means of the relevant system concerned. The transfer may not be in favour of more than four transferees.

30. **REFUSAL TO REGISTER TRANSFERS**

30.1 The directors may, in their absolute discretion, refuse to register the transfer of a share in certificated form which is not fully paid. They may also refuse to register a transfer of a share in certificated form (whether fully paid or not) unless the instrument of transfer:

30.1.1 is lodged, duly stamped, at the Office or at such other place as the directors may appoint and (except in the case of a transfer by a financial institution where a certificate has not been issued in respect of the share) is accompanied by the certificate for the share to which it relates and such other evidence as the directors may reasonably require to show the right of the transferor to make the transfer;

30.1.2 is in respect of only one class of share; and

30.1.3 is in favour of not more than four transferees.

30.2 The directors may refuse to register a transfer of a share in uncertificated form to a person who is to hold it thereafter in certificated form in any case where the Company is entitled to refuse (or is excepted from the requirement) under the Uncertificated Securities Regulations to register the transfer.

31. **NOTICE OF AND REASONS FOR REFUSAL**

If the directors refuse to register a transfer of a share, they shall as soon as practicable and in any event within two months after the date on which the transfer was lodged with the Company (in the case of a transfer of a share in certificated form) or the date on which the Operator-instruction was received by the Company (in the case of a transfer of a share in uncertificated form to a person who is to hold it thereafter in certificated form) send to the transferee notice of the refusal together with reasons for the refusal. The directors shall send such further information about the reasons for the refusal to the transferee as the transferee may reasonably request.

32. **NO FEE FOR REGISTRATION**

No fee shall be charged for the registration of any instrument of transfer or other document or instruction relating to or affecting the title to any share.

33. **RETENTION OR RETURN OF INSTRUMENT OF TRANSFER**

The Company shall be entitled to retain any instrument of transfer which is registered, but any instrument of transfer which the directors refuse to register shall (except in the case of fraud) be returned to the person lodging it when notice of the refusal is given.

34. **RECOGNITION OF RENUNCIATION**

Nothing in these articles shall preclude the directors from recognising a renunciation of the allotment of any share by the allottee in favour of some other person.

TRANSMISSION OF SHARES

35. **TRANSMISSION ON DEATH**

If a member dies the survivor or survivors where he was a joint holder, or his personal representatives where he was a sole holder or the only survivor of joint holders, shall be the only persons recognised by the Company as having any title to his interest. However, nothing in this article 35 shall release the estate of a deceased member from any liability in respect of any share which had been solely or jointly held by him.

36. **ELECTION OF PERSON ENTITLED BY TRANSMISSION**

A person becoming entitled to a share in consequence of the death or bankruptcy of a member or otherwise by operation of law may, upon such evidence being produced as the directors may properly require to show his title to the share, elect either to become the holder of the share or to have some person nominated by him registered as the transferee. If he elects to become the holder he shall give notice to the Company to that effect. If he elects to have another person registered he shall transfer title to the share to that person. All the provisions of these articles relating to the transfer of shares shall apply to the notice or instrument of transfer (if any) as if it were an instrument of transfer signed by the member and the death or bankruptcy of the member or other event giving rise to the entitlement to the share by operation of law had not occurred.

37. **RIGHTS OF PERSON ENTITLED BY TRANSMISSION**

A person becoming entitled to a share by reason of the death or bankruptcy of a member or otherwise by operation of law shall, after giving notice to the Company of his entitlement to the share and upon such evidence being produced as the directors may properly require to show his title to the share, have the rights to which he would be entitled if he were the holder of the share, except that he shall not, before being registered as the holder of the share, be entitled in respect of it to attend or vote at any general meeting or at any separate meeting of the holders of any class of shares. A person entitled to a share who has elected for that share to be transferred to some other person pursuant to article 36 shall cease to be entitled to any rights in relation to such share upon that other person being registered as the holder of that share.

DISCLOSURE OF INTERESTS

38. **DISCLOSURE OF INTERESTS**

38.1 If a member, or any other person appearing to be interested in shares held by that member, has been given a notice under section 793 of the Companies Act 2006 and has failed in relation to any shares (the **"default shares"**) to give the Company the information thereby required within 14 days from the date of giving the notice, the following sanctions shall apply, unless the directors otherwise determine in their absolute discretion, in relation to the default shares, including following any transfer of the default shares unless the transfer is an excepted transfer under this article 38:

38.1.1 the member shall not be entitled in respect of the default shares to be present or to vote (either in person or by representative or proxy) at any general meeting or at any separate meeting of the holders of any class of shares or on any poll; and

38.1.2 where the default shares represent at least 0.25 per cent of their class (calculated exclusive of treasury shares):

(A) any dividend payable in respect of the shares shall be withheld by the Company, which shall not have any obligation to pay interest on it, and the member shall not be entitled to elect, pursuant to these articles, to receive shares instead of that dividend; and

(B) no transfer, other than an excepted transfer, of any shares held by the member in certificated form shall be registered unless:

(1) the member is not himself in default as regards supplying the information required; and

(2) the member proves to the satisfaction of the directors that no person in default as regards supplying such information is interested in any of the shares the subject of the transfer;

38.2 Where the sanctions under article 38.1 apply in relation to any shares, they shall cease to have effect at the end of the period of seven days (or such shorter period as the directors may determine) following the earlier of:

38.2.1 receipt by the Company of the information required by the notice mentioned in that article; and

38.2.2 receipt by the Company of notice that the shares have been transferred by means of an excepted transfer.

The directors may suspend or cancel any of the sanctions at any time in relation to any shares.

38.3 Any new shares in the Company issued in right of default shares shall be subject to the same sanctions as apply to the default shares, and the directors may make any right to an allotment of the new shares subject to sanctions corresponding to those which will apply to those shares on issue, provided that:

38.3.1 any sanctions applying to, or to a right to, new shares by virtue of this article 38.3 shall cease to have effect when the sanctions applying to the related default shares cease to have effect (and shall be suspended or cancelled if and to the extent that the sanctions applying to the related default shares are suspended or cancelled); and

38.3.2 article 38.1 shall apply to the exclusion of this article 38.3 if the Company gives a separate notice under section 793 of the Companies Act 2006 in relation to the new shares.

38.4 Where, on the basis of information obtained from a member in respect of any share held by him, the Company gives a notice under section 793 of the Companies Act 2006 (a **"Section 793 Notice"**) to any other person, it shall at the same time send a copy of the notice to the member. The accidental omission to do so, or the non-receipt by the member of the copy, shall, however, not invalidate or otherwise affect the application of this article 38.

38.5 Where the member on whom a Section 793 Notice has been served is a Depositary, the obligations of the Depositary acting in its capacity as such shall be limited to disclosing to the Company such information relating to any person appearing to be interested in the shares held by it as has been recorded by the Depositary in accordance with the arrangements entered into by the Company or approved by the board pursuant to which it was appointed as a Depositary.

38.6 For the purposes of this article 38:

38.6.1 a person, other than the member holding a share, shall be treated as appearing to be interested in that share if the member has informed the Company that the person is, or may be, so interested, or if the Company (after taking account of any information obtained from the member or, pursuant to a notice under section 793 of the Companies Act 2006, from anyone else) knows or has reasonable cause to believe that the person is, or may be, so interested;

38.6.2 **"interested"** shall be construed in the same way as it is for the purpose of section 793 of the Companies Act 2006;

38.6.3 reference to a person having failed to give the Company the information required by a notice, includes (i) reference to his having failed or refused to give all or any part of it; (ii) reference to his having given any information which he knows to be false in a material particular or having recklessly given information which is false in a material particular; and (iii) reference to the Company knowing or having reasonable cause to believe that any of the information provided is false or materially incorrect or incomplete; and

38.6.4 an **"excepted transfer"** means, in relation to any shares held by a member:

(A) a transfer pursuant to acceptance of a takeover offer (within the meaning of section 974 of the Companies Act 2006) in respect of shares in the Company;

(B) a transfer in consequence of a sale made through a recognised investment exchange (as defined in the Financial Services and Markets Act 2000) or any other stock exchange outside the United Kingdom on which the Company's shares are normally traded; or

(C) a transfer which is shown to the satisfaction of the directors to be made in consequence of a sale of the whole of the beneficial interest in the shares to a person who is unconnected with the member and with any other person appearing to be interested in the shares.

38.7 Nothing in this article 38 shall limit the powers of the Company under section 794 of the Companies Act 2006 or any other powers of the Company whatsoever.

39. **UNTRACED MEMBERS**

39.1 The Company shall be entitled to sell at the best price reasonably obtainable any share held by a member, or any share to which a person is entitled by transmission (including in consequence of the death or bankruptcy of the member or otherwise by operation of law), if:

39.1.1 for a period of 12 years no cheque or warrant or other method of payment for amounts payable in respect of the share sent and payable in a manner authorised by these articles has been cashed or effected and no communication has been received by the Company from the member or person concerned;

39.1.2 during that period the Company has paid at least three dividends (whether interim or final) and no such dividend has been claimed by the member or person concerned;

39.1.3 the Company has, after the expiration of that period, sent a notice to the registered address or last known address of the member or person concerned of its intention to sell such share and before sending such a notice to the member or other person concerned, the Company must have used reasonable efforts to trace the member or other person entitled, engaging, if considered appropriate, a professional asset reunification company or other tracing agent; and

39.1.4 the Company has not during the further period of three months following the sending of the notice referred to in article 39.1.3 above and prior to the sale of the share received any communication from the member or person concerned.

39.2 The Company shall also be entitled to sell at the best price reasonably obtainable any additional share issued during the said period of 12 years in right of any share to which article 39.1 applies (or in right of any share so issued), if the criteria in articles 39.1.1, 39.1.3 and 39.1.4 are satisfied in relation to the additional share (but as if the words "for a period of 12 years" were omitted from article 39.1.1 and the words ", after the expiration of that period," were omitted from article 39.1.3).

39.3 To give effect to the sale of any share pursuant to this article 39:

39.3.1 in the case of a share in certificated form, the directors may authorise any person to execute an instrument of transfer of the share to the purchaser or a person nominated by the purchaser and take such other steps (including the giving of directions to or on behalf of the holder, who shall be bound by them) as it thinks fit to effect the transfer; and

39.3.2 in the case of a share in uncertificated form, the directors may:

(A) to enable the Company to deal with the share in accordance with the provisions of this article 39, require the Operator of a relevant system to convert the share into certificated form; and

(B) after such conversion, authorise any person to execute an instrument of transfer of the shares to the purchaser or person nominated by the purchaser and take such other steps (including the giving of directions to or on behalf of the holder, who shall be bound by them) as it thinks fit to effect the transfer.

39.4 The purchaser shall not be bound to see to the application of the proceeds of sale, nor shall his title to the share be affected by any irregularity or invalidity in the proceedings relating to the sale. The Company shall, subject to the provisions of this article 39.4, be indebted to the former member or other person previously entitled to the share for an amount equal to the net proceeds of the sale, but no trust or duty to account shall arise and no interest shall be payable in respect of the proceeds of sale and any money earned on the proceeds of sale may be kept by the Company and used in the business of the Company or invested in any way that the directors may from time to time decide. If no valid claim for the proceeds of sale has been received by the Company during a period of six years from the date on which the relevant shares were sold by the Company under this article 39, the net proceeds of sale shall be forfeited and such former member or other person previously entitled to the share shall no longer be a creditor for the proceeds of sale and the Company will not be obliged to account to such persons for, or be liable to such persons in relation to, the proceeds of sale.

ALTERATION OF CAPITAL

40. CONSOLIDATION AND SUB-DIVISION

40.1 The Company may by ordinary resolution:

40.1.1 consolidate and divide all or any of its share capital into shares of larger amount than its existing shares; and

40.1.2 sub-divide its shares, or any of them, into shares of a smaller amount than its existing shares; and determine that, as between the shares resulting from the sub-division, any of them may have any preference or advantage as compared with the others.

40.2 Where any difficulty arises in regard to any consolidation or division, the directors may settle such difficulty as they see fit. In particular, without limitation, the directors may sell to any person (including the Company) the shares representing the fractions for the best price reasonably obtainable and distribute the net proceeds of sale in due proportion among those members or retain such net proceeds for the benefit of the Company and:

40.2.1 in the case of shares in certificated form, the directors may authorise any person to execute an instrument of transfer of the shares to the purchaser or a person nominated by the purchaser and take such other steps (including the giving of directions to or on behalf of the holder, who shall be bound by them) as they think fit to effect such transfer; and

40.2.2 in the case of shares in uncertificated form, the directors may:

(A) to enable the Company to deal with the share in accordance with the provisions of this article 40, require the Operator of a relevant system to convert the share into certificated form; and

(B) after such conversion, authorise any person to execute an instrument of transfer of the shares to the purchaser or a person nominated by the purchaser and take such other steps (including the giving of directions to or on behalf of the holder, who shall be bound by them) as they think fit to effect the transfer.

40.3 The transferee shall not be bound to see to the application of the purchase money nor shall his title to the shares be affected by any irregularity in or invalidity of the proceedings in reference to the sale.

NOTICE OF GENERAL MEETINGS

41. CALLING GENERAL MEETINGS

The directors may call general meetings. If there are not sufficient directors to form a quorum in order to call a general meeting, any director may call a general meeting. If there is no director, any member of the Company may call a general meeting.

42. NOTICE OF ANNUAL GENERAL MEETINGS AND OTHER GENERAL MEETINGS

An annual general meeting and all other general meetings of the Company shall be called by at least such minimum period of notice as is prescribed or permitted under the Acts. The notice shall specify the place, the date and the time of meeting and the general nature of the business to be transacted, and in the case of an annual general meeting shall specify the meeting as such. Where the Company has given an electronic address in any notice of meeting, any document or information relating to proceedings at the meeting may be sent by electronic means to that address, subject to any conditions or limitations specified in the relevant notice of meeting. Subject to the provisions of these articles and to any rights or restrictions attached to any shares, notices shall be given to all members, to all persons entitled to a share in consequence of the death or bankruptcy of a member or otherwise by operation of law and to the directors and auditors of the Company.

43. **OMISSION OR FAILURE TO GIVE NOTICE AND NON-RECEIPT OF NOTICE**

The accidental omission to give notice of a meeting to, or the failure to give notice due to circumstances beyond the Company's control to, or the non-receipt of notice of a meeting by, any person entitled to receive notice shall not invalidate the proceedings at that meeting.

PROCEEDINGS AT GENERAL MEETINGS

44. **QUORUM**

No business shall be transacted at any meeting unless a quorum is present. Two persons entitled to vote upon the business to be transacted in respect of a majority of the issued shares of the Company, each being a member or a proxy for a member or a duly authorised representative of a corporation which is a member (including for this purpose two persons who are proxies or corporate representatives of the same member), shall be a quorum.

45. **PROCEDURE IF QUORUM NOT PRESENT**

If a quorum is not present within half an hour after the time appointed for holding the meeting, or if during a meeting a quorum ceases to be present, the meeting shall stand adjourned in accordance with article 50.1.

46. **CHAIRING GENERAL MEETINGS**

Meetings of the shareholders shall be presided over by one of the following officers in the order of seniority and if present and acting: the chairman of the board, if any, the vice-chairman of the board, if any, the president, a vice-president, or, if none of the foregoing is in office and present and acting, by a chairman to be chosen by the shareholders. The secretary, or in his absence, an assistant secretary, shall act as secretary of every meeting, but if neither the secretary nor an assistant secretary is present the chairman of the meeting shall appoint a secretary of the meeting.

47. **SECURITY ARRANGEMENTS AND ORDERLY CONDUCT**

47.1 The directors or the chairman of the meeting may direct that any person wishing to attend any general meeting should submit to and comply with such searches or other security arrangements (including without limitation, requiring evidence of identity to be produced before entering the meeting and placing restrictions on the items of personal property which may be taken into the meeting) as they or he consider appropriate in the circumstances. The directors or the chairman of the meeting may in their or his absolute discretion refuse entry to, or eject from, any general meeting any person who refuses to submit to a search or otherwise comply with such security arrangements.

47.2 The directors or the chairman of the meeting may take such action, give such direction or put in place such arrangements as they or he consider appropriate to secure the safety of the people attending the meeting and to promote the orderly conduct of the business of the meeting. Any decision of the chairman of the meeting on matters of procedure or matters arising incidentally from the business of the meeting, and any determination by the chairman of the meeting as to whether a matter is of such a nature, shall be final.

48. **DIRECTORS ENTITLED TO ATTEND AND SPEAK**

Directors may attend and speak at general meetings and at any separate meeting of the holders of any class of shares, whether or not they are members. The directors or the chairman of the meeting may permit other persons who are not members of the Company or otherwise entitled to exercise the rights of members in relation to general meetings to attend and, at the chairman of the meeting's absolute discretion, speak at a general meeting or at any separate class meeting.

49. **ATTENDANCE AND PARTICIPATION AT DIFFERENT PLACES AND BY ELECTRONIC MEANS**

49.1 In the case of any general meeting, the directors may, notwithstanding the specification in the notice convening the general meeting of the place at which the chairman of the meeting shall preside (the **"Principal Place"**), make arrangements for simultaneous attendance and participation by electronic means allowing persons not present together at the same place to attend, speak and vote at the meeting (including the use of satellite meeting places). The arrangements for simultaneous attendance and participation at any place at which persons are participating, using electronic means may include arrangements for controlling or regulating the level of attendance at any particular venue provided that such arrangements shall operate so that all members and proxies wishing to attend the meeting are able to attend at one or other of the venues.

49.2 The members or proxies at the place or places at which persons are participating via electronic means shall be counted in the quorum for, and be entitled to vote at, the general meeting in question, and that meeting shall be duly constituted and its proceedings valid if the chairman of the meeting is satisfied that adequate facilities are available throughout the meeting to ensure that the members or proxies attending at the places at which persons are participating via electronic means are able to:

49.2.1 participate in the business for which the meeting has been convened; and

49.2.2 see and hear all persons who speak (whether through the use of microphones, loud speakers, audiovisual communication equipment or otherwise) in the Principal Place (and any other place at which persons are participating via electronic means).

49.3 For the purposes of all other provisions of these articles (unless the context requires otherwise), the members shall be treated as meeting at the Principal Place.

49.4 If it appears to the chairman of the meeting that the facilities at the Principal Place or any place at which persons are participating via electronic means have become inadequate for the purposes set out in articles 49.2.1 and 49.2.2 above, the chairman of the meeting may, without the consent of the meeting, interrupt or adjourn the general meeting. All business conducted at the general meeting up to the point of the adjournment shall be valid. The provisions of article 50.3 shall apply to that adjournment.

50. **ADJOURNMENTS**

50.1 If a quorum is not present within half an hour after the time appointed for holding the meeting, or if during a meeting a quorum ceases to be present, the meeting shall stand adjourned and (subject to the provisions of the Acts) the chairman of the meeting shall either specify the time and place to which it is adjourned or state that it is adjourned to such time and place as the directors may determine. If at the adjourned meeting a quorum is not present within 15 minutes after the time appointed for holding the meeting, the meeting shall be dissolved.

50.2 Without prejudice to any other power of adjournment he may have under these articles or at common law:

50.2.1 the chairman of the meeting may, with the consent of a meeting at which a quorum is present (and shall if so directed by the meeting), adjourn the meeting;

50.2.2 the chairman of the meeting may, without the consent of the meeting, adjourn the meeting before or after it has commenced, if the chairman of the meeting considers that:

(A) there is not enough room for the number of members and proxies who wish to attend the meeting;

(B) the behaviour of anyone present prevents, or is likely to prevent, the orderly conduct of the business of the meeting;

(C) an adjournment is necessary to protect the safety of any person attending the meeting; or

(D) an adjournment is otherwise necessary in order for the business of the meeting to be properly carried out.

If so adjourned, the chairman of the meeting shall either specify the time and place to which it is adjourned or state that it is adjourned to such time and place as the directors may determine.

50.3 Subject to the provisions of the Acts, it shall not be necessary to give notice of an adjourned meeting except that when a meeting is adjourned for 14 days or more, at least seven clear days' notice shall be given specifying the time and place of the adjourned meeting and the general nature of the business to be transacted. No business shall be transacted at an adjourned meeting other than business which might properly have been transacted at the meeting had the adjournment not taken place.

50.4 Subject to article 50.1, meetings can be adjourned more than once, in accordance with the procedures set out in this article 50.

AMENDMENTS TO RESOLUTIONS

51. AMENDMENTS TO SPECIAL AND ORDINARY RESOLUTIONS

51.1 A special resolution to be proposed at a general meeting may be amended by ordinary resolution if:

51.1.1 the chairman of the meeting proposes the amendment at the general meeting at which the resolution is to be proposed; and

51.1.2 the amendment does not go beyond what is necessary to correct a clear error in the resolution.

51.2 An ordinary resolution to be proposed at a general meeting may be amended by ordinary resolution if:

51.2.1 written notice of the terms of the proposed amendment and of the intention to move the amendment have been delivered to the Company at the Office at least 48 hours before the time for holding the meeting or the adjourned meeting at which the ordinary resolution in question is proposed and the proposed amendment does not, in the reasonable opinion of the chairman of the meeting, materially alter the scope of the resolution; or

51.2.2 the chairman of the meeting, in his absolute discretion, decides that the proposed amendment may be considered or voted on.

52. WITHDRAWAL AND RULING AMENDMENTS OUT OF ORDER

With the consent of the chairman of the meeting, an amendment may be withdrawn by its proposer before it is voted on. If an amendment proposed to any resolution under consideration is ruled out of order by the chairman of the meeting, the proceedings on the resolution shall not be invalidated by any error in the ruling.

POLLS

53. VOTING BY POLL

A resolution put to the vote of a general meeting must be decided by a poll. For so long as any shares are held by Cede & Co., this article 53 may only be amended by unanimous shareholder resolution.

54. **CHAIRMAN'S DECLARATION**

A declaration by the chairman of the meeting that a resolution has been carried or carried unanimously, or by a particular majority, or lost, or not carried by a particular majority, and an entry in respect of such declaration in the minutes of the meeting, shall be conclusive evidence of the fact without proof of the number or proportion of the votes recorded in favour of or against the resolution.

55. **POLLS TO BE TAKEN AS CHAIRMAN DIRECTS**

Polls at general meetings shall be taken when, where and in such manner as the chairman of the meeting directs. The chairman of the meeting may appoint scrutineers (who need not be members) and decide how and when the result of the poll is to be declared. The result of a poll shall be the decision of the meeting in respect of the resolution on which the poll was taken.

VOTES OF MEMBERS

56. **VOTING RIGHTS**

Subject to any rights or restrictions attached to any shares:

56.1.1 on a poll every member present in person or by duly appointed proxy or corporate representative has one vote for every share of which he is the holder or in respect or which his appointment as proxy or corporate representative has been made; and

56.1.2 a member, proxy or corporate representative entitled to more than one vote need not, if he votes, use all his votes or cast all the votes he uses the same way.

57. **VOTING RECORD DATE**

For the purposes of determining which persons are entitled to attend or vote at a general meeting and how many votes such persons may cast, the Company may specify in the notice convening the meeting a time, being not more than 48 hours before the time fixed for the meeting (and for this purpose no account shall be taken of any part of a day that is not a working day), by which a person must be entered on the register in order to have the right to attend or vote at the meeting.

58. **VOTES OF JOINT HOLDERS**

In the case of joint holders the vote of the joint holder whose name appears first on the register of members in respect of the joint holding shall be accepted to the exclusion of the votes of the other joint holders.

59. **VOTES ON BEHALF OF AN INCAPABLE MEMBER**

A member in respect of whom an order has been made by any court having jurisdiction (whether in the United Kingdom or elsewhere) in matters concerning mental disorder may vote, on a poll, by any person authorised in that behalf by that court and the person so authorised may exercise other rights in relation to general meetings, including appointing a proxy. Evidence to the satisfaction of the directors of the authority of the person claiming the right to vote shall be delivered to the Office, or such other place as is specified in accordance with these articles for the delivery or receipt of appointments of proxy, not less than 24 hours before the time appointed for holding the meeting or adjourned meeting at which the right to vote is to be exercised, and in default the right to vote shall not be exercisable.

60. **NO RIGHT TO VOTE WHERE SUMS OVERDUE**

No member shall have the right to vote at any general meeting or at any separate meeting of the holders of any class of shares, either in person or by proxy, in respect of any share held by him unless all amounts presently payable by him in respect of that share have been paid.

61. **OBJECTIONS AND VALIDITY OF VOTES**

61.1 Any objection to the qualification of any person voting at a general meeting or on a poll or to the counting of, or failure to count, any vote, must be made at the meeting or adjourned meeting or at the time the poll is taken (if not taken at the meeting or adjourned meeting) at which the vote objected to is tendered. Any objection made in due time shall be referred to the chairman of the meeting whose decision shall be final and conclusive. If a vote is not disallowed by the chairman of the meeting it is valid for all purposes.

61.2 The Company shall not be bound to enquire whether any proxy or corporate representative votes in accordance with the instructions given to him by the member he represents and if a proxy or corporate representative does not vote in accordance with the instructions of the member he represents the vote or votes cast shall nevertheless be valid for all purposes.

PROXIES AND CORPORATE REPRESENTATIVES

62. **APPOINTMENT OF PROXIES**

62.1 A member is entitled to appoint another person as his proxy to exercise all or any of his rights to attend and to speak and vote at a meeting of the Company. Delivery of an appointment of proxy shall not preclude a member from attending and voting at the meeting or at any adjournment of it. A proxy need not be a member. A member may appoint more than one proxy in relation to a meeting, provided that each proxy is appointed to exercise the rights attached to a different share or shares held by him. References in these articles to an appointment of proxy include references to an appointment of multiple proxies.

62.2 Where two or more valid appointments of proxy are received in respect of the same share in relation to the same meeting, the one which is last sent shall be treated as replacing and revoking the other or others. If the Company is unable to determine which is last sent, the one which is last received shall be so treated. If the Company is unable to determine either which is last sent or which is last received, none of such appointments shall be treated as valid in respect of such share.

63. **FORM OF PROXY APPOINTMENT**

63.1 Subject to article 64 an appointment of proxy shall be in writing in any usual form or in any other form which the directors may approve and shall be executed by or on behalf of the appointor which in the case of a corporation may be either under its common seal or under the hand of a duly authorised officer or other person duly authorised for that purpose. The signature on the appointment of proxy need not be witnessed.

63.2 Where the appointment of a proxy is expressed to have been or purports to have been executed by a duly authorised person on behalf of a member:

63.2.1 the Company may treat the appointment as sufficient evidence of that person's authority to execute the appointment of proxy on behalf of that member; and

63.2.2 the member shall, if requested by or on behalf of the Company, send or procure the sending of any authority under which the appointment of proxy has been executed, or a certified copy of any such authority to such address and by such time as required under article 65 and, if the request is not complied with in any respect, the appointment of proxy may be treated as invalid.

64. **PROXIES SENT OR SUPPLIED IN ELECTRONIC FORM**

The directors may (and shall if and to the extent that the Company is required to do so by the Acts) allow an appointment of proxy to be sent or supplied in electronic form subject to any conditions or limitations as the directors may specify. Where the Company has given an electronic address in any instrument of proxy or invitation to appoint a proxy, any document or information relating to proxies for the meeting (including any document necessary to show the validity of, or otherwise relating to, an appointment of proxy, or notice of the termination of the authority of a proxy) may be sent by electronic means to that address, subject to any conditions or limitations specified in the relevant notice of meeting.

65. RECEIPT OF APPOINTMENTS OF PROXY

65.1 An appointment of proxy may:

65.1.1 in the case of an appointment of proxy in hard copy form, be received at the Office or such other place as is specified in the notice convening the meeting, or in any appointment of proxy or any invitation to appoint a proxy sent out or made available by the Company in relation to the meeting, not less than 24 hours before the time for holding the meeting or adjourned meeting to which it relates;

65.1.2 in the case of an appointment of proxy in electronic form, be received at the electronic address specified in the notice convening the meeting, or in any instrument of proxy or any invitation to appoint a proxy sent out or made available by the Company in relation to the meeting, not less than 24 hours before the time for holding the meeting or adjourned meeting to which it relates; and

65.1.3 in the case of a poll taken subsequently to the date of the meeting or adjourned meeting, be received as aforesaid not less than 24 hours (or such shorter time as the directors may determine) before the time appointed for the taking of the poll.

65.2 The directors may specify in the notice convening the meeting that in determining the time for delivery of proxies pursuant to this article 65, no account shall be taken of any part of any day that is not a working day. An appointment of proxy which is not received or delivered in a manner so permitted shall be invalid.

66. TERMINATION OF APPOINTMENTS OF PROXY

A vote given by proxy shall be valid notwithstanding the previous termination of the authority of the person voting, unless notice of the termination was delivered in writing to the Company at such place or address at which an appointment of proxy may be duly received under article 65 not later than the last time at which an appointment of proxy should have been received under article 65 in order for it to be valid.

67. AVAILABILITY OF APPOINTMENTS OF PROXY

The directors may at the expense of the Company send or make available appointments of proxy or invitations to appoint a proxy to the members by post or by electronic means or otherwise (with or without provision for their return prepaid) for use at any general meeting or at any separate meeting of the holders of any class of shares, either in blank or nominating in the alternative any one or more of the directors or any other person. If for the purpose of any meeting, appointments of proxy or invitations to appoint as proxy a person or one of a number of persons specified in the invitations are issued at the Company’s expense, they shall be issued to all (and not to some only) of the members entitled to be sent a notice of the meeting and to vote at it. The accidental omission, or the failure due to circumstances beyond the Company’s control, to send or make available such an appointment of proxy or give such an invitation to, or the non-receipt thereof by, any member entitled to attend and vote at a meeting shall not invalidate the proceedings at that meeting.

68. CORPORATIONS ACTING BY REPRESENTATIVES

68.1 Subject to the provisions of the Acts, any corporation (other than the Company itself) which is a member of the Company may, by resolution of its directors or other governing body, authorise a person or persons to act as its representative or representatives at any meeting of the Company, or at any separate meeting of the holders of any class of shares. The corporation shall for the purposes of these articles be deemed to be present in person at any such meeting if a person or persons so authorised is present at it. The Company may require such person or persons to produce a certified copy of the resolution before permitting him to exercise his powers.

68.2 A vote given by a corporate representative shall be valid notwithstanding that he is no longer authorised to represent the member unless notice of the termination was delivered in writing to the Company at such place or address and by such time as is specified in article 65 for the receipt of an appointment of proxy.

APPOINTMENT AND RETIREMENT OF DIRECTORS

69. **NUMBER OF DIRECTORS**

Unless otherwise determined by the Company by ordinary resolution the number of directors shall not be less than two.

70. **POWER OF COMPANY TO APPOINT A DIRECTOR**

Subject to the provisions of these articles, the Company may by ordinary resolution appoint a person who is willing to act as a director, and is permitted by law to do so, to be a director, either to fill a vacancy or as an additional director.

71. **PROCEDURE FOR APPOINTMENT OR REAPPOINTMENT AT GENERAL MEETING**

No person other than a director retiring at the meeting shall be appointed or reappointed a director at any general meeting unless:

71.1.1 he is recommended by the directors; or

71.1.2 not less than seven nor more than 35 days before the date appointed for holding the meeting, notice executed by a member qualified to vote on the appointment or reappointment has been given to the Company of the intention to propose that person for appointment or reappointment, stating the particulars which would, if he were appointed or reappointed, be required to be included in the Company's register of directors, together with notice executed by that person of his willingness to be appointed or reappointed.

72. **ELECTION OF TWO OR MORE DIRECTORS**

At a general meeting a motion for the appointment of two or more persons as directors by a single resolution shall not be made, unless a resolution that it shall be so made has first been agreed to by the meeting without any vote being given against it. For the purposes of this article 72 a motion for approving a person's appointment or for nominating a person for appointment shall be treated as a motion for his appointment.

73. **POWER OF DIRECTORS TO APPOINT A DIRECTOR**

The directors may appoint a person who is willing to act as a director, and is permitted by law to do so, to be a director, either to fill a vacancy or as an additional director, provided that the appointment does not cause the number of directors to exceed any number fixed as the maximum number of directors. A director so appointed shall retire at the next annual general meeting notice of which is first given after his appointment and shall then be eligible for reappointment.

74. **ANNUAL RETIREMENT OF DIRECTORS**

At each annual general meeting all of the directors shall retire from office except any director appointed by the board after the notice of that annual general meeting has been given and before that annual general meeting has been held.

75. **FILLING OF VACANCY**

If the Company, at the meeting at which a director retires, does not fill the vacancy the retiring director shall, if willing to act, be deemed to have been reappointed unless at the meeting it is resolved not to fill the vacancy or a resolution for the reappointment of the director is put to the meeting and lost.

76. **DIRECTOR NOT REAPPOINTED AT ANNUAL GENERAL MEETING**

A director who retires at an annual general meeting may be reappointed. If he is not reappointed or deemed to have been reappointed, he shall retain office until the meeting elects someone in his place or, if it does not do so, until the close of the meeting.

DISQUALIFICATION AND REMOVAL OF DIRECTORS

77. **REMOVAL OF DIRECTOR**

In addition to any power of removal under the Acts, the Company may, by special resolution, remove a director before the expiration of his period of office and, subject to these articles, may, by ordinary resolution, appoint another person who is willing to act as a director, and is permitted by law to do so, to be a director instead of him.

78. **TERMINATION OF A DIRECTOR'S APPOINTMENT**

A person ceases to be a director as soon as:

78.1.1 that person ceases to be a director by virtue of any provision of the Acts or is prohibited from being a director by law;

78.1.2 a bankruptcy order is made against that person;

78.1.3 a composition is made with that person's creditors generally in satisfaction of that person's debts; or

78.1.4 notification is received by the Company from that person that he is resigning or retiring from his office as director, and such resignation or retirement has taken effect in accordance with its terms.

POWERS OF DIRECTORS

79. **GENERAL POWERS OF THE COMPANY VESTED IN THE DIRECTORS**

The business of the Company shall be managed by the directors who, subject to the provisions of these articles and to any directions given by special resolution of the Company to take, or refrain from taking, specified action, may exercise all the powers of the Company. No alteration of these articles and no such direction shall invalidate any prior act of the directors which would have been valid if that alteration had not been made or that direction had not been given. The general management powers given by this article 79 shall not be limited by any special authority or power given to the directors by any other article.

80. **PROVISION FOR EMPLOYEES ON CESSATION OR TRANSFER OF BUSINESS**

The directors may decide to make provision for the benefit of persons employed or formerly employed by the Company or any of its subsidiary undertakings (other than a director or former director or shadow director) in connection with the cessation or transfer to any person of the whole or part of the undertaking of the Company or that subsidiary undertaking.

81. **DELEGATION TO PERSONS OR COMMITTEES**

81.1 Subject to the provisions of these articles, the directors may delegate any of the powers which are conferred on them under the articles:

81.1.1 to such person or committee;

81.1.2 by such means (including by power of attorney);

81.1.3 to such an extent;

81.1.4 in relation to such matters or territories; and

81.1.5 on such terms and conditions,

as they think fit.

81.2 If the directors so specify, any such delegation may authorise further delegation of the directors' powers by any person to whom they are delegated.

81.3 The directors may revoke any delegation in whole or part, or alter its terms and conditions.

81.4 The power to delegate under this article 81 includes power to delegate the determination of any fee, remuneration or other benefit which may be paid or provided to any director.

81.5 Subject to article 81.6, the proceedings of any committee appointed under article 81.1.1 with two or more members shall be governed by such of these articles as regulate the proceedings of directors so far as they are capable of applying.

81.6 The directors may make rules regulating the proceedings of such committees, which shall prevail over any rules derived from these articles pursuant to article 81.5 if, and to the extent that, they are not consistent with them.

81.7 References to a committee of the directors are to a committee established in accordance with these articles, whether or not comprised wholly of directors.

DIRECTORS' REMUNERATION, GRATUITIES AND BENEFITS

82. DIRECTORS' REMUNERATION

82.1 Until otherwise determined by the Company by ordinary resolution, there shall be paid to the directors who do not hold executive office such fees for their services in the office of director as the directors may determine. The fees shall be deemed to accrue from day to day and shall be distinct from and additional to any remuneration or other benefits which may be paid or provided to any director pursuant to any other provision of these articles.

82.2 Any director who holds any other office in the Company (including for this purpose the office of chairman, president or lead director), or who serves on any committee of the directors, or who performs, or undertakes to perform, services which the directors consider go beyond the ordinary duties of a director may be paid such additional remuneration (whether by way of fixed sum, bonus, commission, participation in profits or otherwise) as the directors may determine.

83. EXPENSES

The directors may also be paid all reasonable expenses properly incurred by them in connection with their attendance at meetings of the directors or of committees of the directors or general meetings or separate meetings of the holders of any class of shares or of debentures of the Company and any reasonable expenses properly incurred by them otherwise in connection with the exercise of their powers and the discharge of their responsibilities in relation to the Company.

84. DIRECTORS' GRATUITIES AND BENEFITS

The directors may (by the establishment of, or maintenance of, schemes or otherwise) provide benefits, whether by the payment of allowances, gratuities or pensions, or by insurance or death, sickness or disability benefits or otherwise, for any director or any former director of the Company or of any body corporate which is or has been a subsidiary undertaking of the Company or a predecessor in business of the Company or of any such subsidiary undertaking, and for any member of his family (including a spouse or civil partner or a former spouse or former civil partner) or any person who is or was dependent on him and may (before as well as after he ceases to hold such office) contribute to any fund and pay premiums for the purchase or provision of any such benefit.

DIRECTORS' APPOINTMENTS AND INTERESTS

85. **OTHER INTERESTS AND OFFICES**

85.1 Provided that he has disclosed to the directors the nature and extent of any material interest of his, a director notwithstanding his office:

85.1.1 may be a party to, or otherwise interested in, any transaction or arrangement with the Company or in which the Company is otherwise interested;

85.1.2 may be a director or other officer of, or be employed by, or hold any position with, or be a party to any transaction or arrangement with, or otherwise interested in, any body corporate in which the Company is interested.

85.2 No transaction or arrangement shall be liable to be avoided on the ground of any interest, office, employment or position within article 85.1 above and the relevant director:

85.2.1 shall not infringe his duty to avoid a situation in which he has, or can have, a direct or indirect interest that conflicts, or possibly may conflict, with the interests of the Company as a result of any such office, employment or position, or any such transaction or arrangement, or any interest in any such body corporate;

85.2.2 shall not, by reason of his office as a director of the Company be accountable to the Company for any benefit which he derives from any such office, employment or position, or any such transaction or arrangement, or from any interest in any such body corporate;

85.2.3 shall not be required to disclose to the Company, or use in performing his duties as a director of the Company, any confidential information relating to any such office, employment, or position if to make such a disclosure or use would result in a breach of a duty or obligation of confidence owed by him in relation to or in connection with such office, employment or position; and

85.2.4 may absent himself from discussions, whether in meetings of the directors or otherwise, and exclude himself from information, which will or may relate to such office, employment, position, transaction, arrangement or interest.

85.3 For the purposes of articles 85.1, 85.2 and 85.3:

85.3.1 a general notice given to the directors that a director is to be regarded as having an interest of the nature and extent specified in the notice in any transaction or arrangement in which a specified person or class of persons is interested shall be deemed to be a disclosure that the director has an interest in any such transaction of the nature and extent so specified;

85.3.2 an interest of which a director has no knowledge and of which it is unreasonable to expect him to have knowledge shall not be treated as an interest of his;

85.3.3 a director shall be deemed to have disclosed the nature and extent of an interest which consists of him being a director, officer or employee of any subsidiary undertaking of the Company;

85.3.4 a director need not disclose an interest if it cannot be reasonably regarded as likely to give rise to a conflict of interest; and

85.3.5 a director need not disclose an interest if, or to the extent that, the other directors are already aware of it (and for this purpose the other directors are treated as aware of anything of which they ought reasonably to be aware).

85.4 The directors may (subject to such terms and conditions, if any, as they may think fit to impose from time to time, and subject always to their right to vary or terminate such authorisation) authorise, to the fullest extent permitted by law:

85.4.1 any matter which would otherwise result in a director infringing his duty to avoid a situation in which he has, or can have, a direct or indirect interest that conflicts, or possibly may conflict, with the interests of the Company and which may reasonably be regarded as likely to give rise to a conflict of interest (including a conflict of interest and duty or conflict of duties); and

85.4.2 a director to accept or continue in any office, employment or position in addition to his office as a director of the Company and, without prejudice to the generality of article 85.4.1, may authorise the manner in which a conflict of interest arising out of such office, employment or position may be dealt with, either before or at the time that such a conflict of interest arises, provided that the authorisation is effective only if (i) any requirement as to the quorum at the meeting at which the matter is considered is met without counting the director in question or any other interested director, and (ii) the matter was agreed to without their voting or would have been agreed to if their votes had not been counted.

85.5 If a matter, or office, employment or position, has been authorised by the directors in accordance with article 85.4 and this article 85.5 then (subject to such terms and conditions, if any, as the directors may think fit to impose from time to time, and subject always to their right to vary or terminate such authorisation or the permissions set out below) no transaction or arrangement relating to any such matter shall be liable to be avoided on the ground of any such matter, or office, employment or position and the relevant director:

85.5.1 shall not infringe his duty to avoid a situation in which he has, or can have, a direct or indirect interest that conflicts, or possibly may conflict, with the interests of the Company as a result of any such matter, or office, employment or position;

85.5.2 shall not, by reason of his office as a director of the Company, be accountable to the Company for any benefit which he derives from any such matter, or from any such office, employment or position;

85.5.3 shall not be required to disclose to the Company, or use in performing his duties as a director of the Company, any confidential information relating to such matter, or such office, employment or position if to make such a disclosure or use would result in a breach of a duty or obligation of confidence owed by him in relation to or in connection with that matter, or that office, employment or position; and

85.5.4 may absent himself from discussions, whether in meetings of the directors or otherwise, and exclude himself from information, which will or may relate to that matter, or that office, employment or position.

PROCEEDINGS OF DIRECTORS

86. PROCEDURES REGARDING BOARD MEETINGS

86.1 Subject to the provisions of these articles, the directors may make any rule which they think fit about how they take decisions, and about how such rules are to be recorded or communicated to directors.

86.2 A director may, and the secretary at the request of a director shall, call a meeting of the directors.

86.3 Notice of a board meeting may be given to a director personally, or by telephone, or sent in hard copy form to him at a postal address in the United States of America notified by him to the Company for this purpose, or sent in electronic form to such electronic address (if any) as may for the time being be notified by him to the Company for that purpose. It shall not be necessary to give notice of a board meeting to a director who is for the time being absent from the United States of America unless he has requested that notices of board meetings shall during his absence be given in hard copy form or in electronic form to him at a postal address or electronic address notified by him to the Company for that purpose. Such notices, however, need not be given any earlier than notices given to directors not so absent. A director may waive notice of any board meeting and any such waiver may be retrospective.

86.4 Questions arising at a meeting shall be decided by a majority of votes. In case of an equality of votes, the chairman shall not have a second or casting vote.

86.5 A meeting of the directors may consist of a conference between directors some or all of whom are in different places provided that each director who participates in the meeting is able:

86.5.1 to hear each of the other participating directors addressing the meeting; and

86.5.2 if he so wishes, to address each of the other participating directors simultaneously,

whether directly, by conference telephone or by any other form of communication equipment (whether in use when this article 86 is adopted or developed subsequently) or by a combination of such methods. A quorum shall be deemed to be present if those conditions are satisfied in respect of at least the number of directors required to form a quorum. A meeting held in this way shall be deemed to take place at the place where the largest group of directors is assembled or, if no such group is readily identifiable, at the place from where the chairman of the meeting participates at the start of the meeting.

87. **NUMBER OF DIRECTORS BELOW MINIMUM**

The continuing directors or a sole continuing director may act notwithstanding any vacancies in their number, but, if the number of directors is less than either the number fixed as the minimum, or the quorum required for a meeting of the directors (or both) the continuing directors or director may act only for the purpose of filling vacancies or of calling a general meeting.

88. **ELECTION AND REMOVAL OF CHAIRMAN AND LEAD DIRECTOR**

The directors may elect from their number, and remove, a chairman and a lead director of the board of directors. The chairman, or in his absence the lead director, shall preside at all meetings of the directors, but if there is no chairman or lead director, or if at the meeting neither the chairman nor the lead director is present within ten minutes after the time appointed for the meeting, or if neither of them is willing to act as chairman, the directors present may choose one of their number to be chairman of the meeting.

89. **RESOLUTIONS IN WRITING**

A resolution in writing agreed to by all the directors entitled to receive notice of a meeting of the directors and who would be entitled to vote (and whose vote would have been counted) on the resolution at a meeting of the directors shall (if that number is sufficient to constitute a quorum) be as valid and effectual as if it had been passed at a meeting of the directors, duly convened and held. A resolution in writing is adopted when all such directors have signed one or more copies of it or have otherwise indicated their agreement to it in writing.

90. **QUORUM**

No business shall be transacted at any meeting of the directors unless a quorum is present. The quorum may be fixed by the directors. If the quorum is not fixed by the directors, the quorum shall be a majority of the directors in office. A director shall not be counted in the quorum present in relation to a matter or resolution on which he is not entitled to vote (or when his vote cannot be counted) but shall be counted in the quorum present in relation to all other matters or resolutions considered or voted on at the meeting.

91. **PERMITTED INTERESTS AND VOTING**

91.1 Subject to the provisions of these articles, a director shall not vote at a meeting of the directors on any resolution concerning a matter in which he has, directly or indirectly, a material interest (other than an interest in shares, debentures or other securities of, or otherwise in or through, the Company), unless his interest arises only because the case falls within one or more of the following:

91.1.1 the resolution relates to the giving to him of a guarantee, security, or indemnity in respect of money lent to, or an obligation incurred by him for the benefit of, the Company or any of its subsidiary undertakings;

91.1.2 the resolution relates to the giving to a third party of a guarantee, security, or indemnity in respect of an obligation of the Company or any of its subsidiary undertakings for which the director has assumed responsibility in whole or part and whether alone or jointly with others under a guarantee or indemnity or by the giving of security;

91.1.3 the resolution relates to the giving to him of any other indemnity which is on substantially the same terms as indemnities given or to be given to all of the other directors or to the funding by the Company of his expenditure on defending proceedings or the doing by the Company of anything to enable him to avoid incurring such expenditure where all other directors have been given or are to be given substantially the same arrangements;

91.1.4 the resolution relates to the purchase or maintenance for any director or directors of insurance against any liability;

91.1.5 his interest arises by virtue of his being, or intending to become, a participant in the underwriting or sub-underwriting of an offer of any shares in or debentures or other securities of the Company for subscription, purchase or exchange;

91.1.6 the resolution relates to an arrangement for the benefit of the employees and directors or former employees and former directors of the Company or any of its subsidiary undertakings, or the members of their families (including a spouse or civil partner or a former spouse or former civil partner) or any person who is or was dependent on such persons, including but without being limited to a retirement benefits scheme and an employees' share scheme, which does not accord to any director any privilege or advantage not generally accorded to the employees or former employees to whom the arrangement relates; or

91.1.7 the resolution relates to a transaction or arrangement with any other company in which he is interested, directly or indirectly (whether as director or shareholder or otherwise), provided that he is not the holder of or beneficially interested in 1 per cent. or more of any class of the equity share capital of that company and not entitled to exercise 1 per cent. or more of the voting rights available to members of the relevant company (and for the purpose of calculating the said percentage there shall be disregarded (i) any shares held by the director as a bare or custodian trustee and in which he has no beneficial interest; (ii) any shares comprised in any authorised unit trust scheme in which the director is interested only as a unit holder; and (iii) any shares of that class held as treasury shares).

91.2 Where proposals are under consideration concerning the appointment (including the fixing or varying of terms of appointment) of two or more directors to offices or employments with the Company or any body corporate in which the Company is interested, the proposals may be divided and considered in relation to each director separately and (provided he is not for any reason precluded from voting) each of the directors concerned shall be entitled to vote and be counted in the quorum in respect of each resolution except that concerning his own appointment.

92. **SUSPENSION OR RELAXATION OF PROHIBITION ON VOTING**

The Company may by ordinary resolution suspend or relax to any extent, in respect of any particular matter, any provision of these articles prohibiting a director from voting at a meeting of the directors or of a committee of the directors.

93. **QUESTIONS REGARDING DIRECTOR'S RIGHTS TO VOTE**

If a question arises at a meeting of the directors as to the right of a director to vote, the question may, before the conclusion of the meeting, be referred to the chairman of the meeting (or, if the director concerned is the chairman, to the other directors at the meeting), and his ruling in relation to any director other than himself (or, as the case may be, the ruling of the majority of the other directors in relation to the chairman) shall be final and conclusive.

OFFICERS

94. OFFICERS

94.1 The officers of the Company shall consist of a president, a secretary, a treasurer, and, if deemed necessary, expedient, or desirable by the board of directors, an executive vice president, one or more other vice presidents, one or more assistant secretaries, one or more assistant treasurers, and such other officers with such titles as the resolution of the board of directors choosing them shall designate. Except as may otherwise be provided in the resolution of the board of directors choosing him, no officer need be a director. Any number of offices may be held by the same person, as the directors may determine.

94.2 Unless otherwise provided in the resolution choosing him, each officer shall be chosen for a term which shall continue until the meeting of the board of directors following the next annual general meeting of shareholders and until his successor shall have been chosen and qualified.

94.3 All officers of the Company shall have such authority and perform such duties in the management and operation of the Company as shall be prescribed in the resolutions of the board of directors designating and choosing such officers and prescribing their authority and duties, and shall have such additional authority and duties as are incident to their office except to the extent that such resolutions may be inconsistent therewith. The secretary or an assistant secretary of the Company shall record all of the proceedings of all meetings and actions in writing of shareholders, directors, and committees of directors, and shall exercise such additional authority and perform such additional duties as the board shall assign to him. Any officer may be removed, with or without cause, by the board of directors. Any vacancy in any office may be filled by the board of directors.

EXECUTIVE SESSIONS

95. EXECUTIVE SESSIONS

95.1 Executive sessions of the board shall be held at such time as the chairman of the board, if present and acting, shall fix, provided that the chairman is independent. Otherwise, the lead director, if any, shall fix the time for any executive session of the board.

95.2 Executive sessions of the board shall be held at such place as shall be fixed by the board.

95.3 Executive sessions of the board may be called by or at the direction of the chairman of the board, if any, provided that the chairman is independent. Otherwise, the lead director, if any, shall have the authority to call an executive session of the board. No call shall be necessary for executive sessions of the board held in conjunction with regular meetings of the board.

95.4 The chairman of the board, if any and if present and independent, shall preside at all executive sessions of the board. Otherwise, the lead director, if present and acting, or any other director chosen by the board, shall preside.

DIVIDENDS

96. DECLARATION OF DIVIDENDS BY COMPANY

The Company may by ordinary resolution declare dividends in accordance with the respective rights of the members, but no dividend shall exceed the amount recommended by the directors.

97. PAYMENT OF INTERIM DIVIDENDS

The directors may pay interim dividends if it appears to them that they are justified by the profits of the Company available for distribution. If the share capital is divided into different classes, the directors may pay interim dividends on shares which confer deferred or non-preferred rights with regard to dividend as well as on shares which confer preferential rights with regard to dividend, but no interim dividend shall be paid on shares carrying deferred or non-preferred rights if, at the time of payment, any preferential dividend is in arrear. The directors may also pay at intervals settled by them any dividend payable at a fixed rate if it appears to them that the profits available for distribution justify the payment. If the directors act in good faith they shall not incur any liability to the holders of shares conferring preferred rights for any loss they may suffer by the lawful payment of an interim dividend on any shares having deferred or non-preferred rights.

98. **PAYMENT ACCORDING TO AMOUNT PAID UP**

Except as otherwise provided by these articles or the rights attached to shares, all dividends shall be declared and paid according to the amounts paid up on the shares on which the dividend is paid. If any share is issued on terms that it ranks for dividend as from a particular date, it shall rank for dividend accordingly. In any other case (and except as aforesaid), dividends shall be apportioned and paid proportionately to the amounts paid up on the shares during any portion or portions of the period in respect of which the dividend is paid. For the purpose of this article 98, no account is to be taken of any amount which has been paid up on a share in advance of the due date for payment of that amount.

99. **NON-CASH DISTRIBUTION**

A general meeting declaring a dividend may, upon the recommendation of the directors, direct that it shall be satisfied wholly or partly by the distribution of specific assets and in particular of fully paid shares or debentures of any other company. Where any difficulty arises in regard to the distribution, the directors may settle the same as they think fit and in particular (but without limitation) may:

99.1.1 issue fractional certificates or other fractional entitlements (or ignore fractions) and fix the value for distribution of such specific assets or any part thereof;

99.1.2 determine that cash shall be paid to any member on the basis of the value so fixed in order to adjust the rights of those entitled to participate in the dividend; and

99.1.3 vest any such specific assets in trustees.

100. **DIVIDEND PAYMENT PROCEDURE**

100.1 Any dividend or other money payable relating to a share shall be paid to:

100.1.1 the holder;

100.1.2 if the share is held by more than one holder, all joint holders; or

100.1.3 the person or persons becoming entitled to the share by reason of the death or bankruptcy of a holder or otherwise by operation of law,

and such person shall be referred to as the “recipient” for the purposes of this article 100 and article 101.

100.2 Any dividend or other money payable relating to a share shall be paid by such method as the directors decide. Without limiting any other method of payment which the directors may decide upon, the payments may be made, wholly or partly:

100.2.1 by sending a cheque, warrant or any other similar financial instrument to the recipient by post addressed to his registered address or postal address given pursuant to article 108.4 or, in the case of joint recipients, by sending such cheque, warrant or any other similar financial instrument to the registered or postal address of whichever of the joint recipients’ names appears first on the register of members, or, in the case of persons entitled by operation of law, to any such persons;

100.2.2 by inter-bank transfer or any other electronic form or electronic means to an account (of a type approved by the directors) which is specified in a written instruction from the recipient (or, in the case of joint recipients, all joint recipients);

100.2.3 in respect of shares in uncertificated form, where the Company is authorised to do so by or on behalf of the recipient (or, in the case of joint recipients, all joint recipients) in such manner as the directors may from time to time consider sufficient, by means of a relevant system;

100.2.4 in some other way requested in writing by the recipients (or, in the case of joint recipients, all joint recipients) and agreed by the Company;

100.2.5 in the case of a Depositary, and subject to the approval of the directors, to such persons and postal addresses as the Depositary may direct; or

100.2.6 to such other person as may be set out in a written instruction from the recipient (or, in the case of joint recipients, all joint recipients), in which case payment shall be made in accordance with articles 100.2.1 to 100.2.4 above, as specified in the written instruction.

100.3 In respect of the payment of any dividend or other sum which is a distribution, the directors may decide, and notify recipients, that:

100.3.1 one or more of the means described in article 100.2 will be used for payment and a recipient may elect to receive the payment by one of the means so notified in the manner prescribed by the directors;

100.3.2 one or more of such means will be used for the payment unless a recipient elects otherwise in the manner prescribed by the directors; or

100.3.3 one or more of such means will be used for the payment and that recipients will not be able to elect otherwise.

The directors may for this purpose decide that different methods of payment may apply to different recipients or groups of recipients.

100.4 All cheques, warrants and similar financial instruments are sent, and payment in any other way is made, at the risk of the person who is entitled to the money and the Company will not be responsible for a payment which is lost, rejected or delayed. The Company can rely on a receipt for a dividend or other money paid in relation to a share from any one of the joint recipients on behalf of all of them. The Company is treated as having paid a dividend if the cheque, warrant or similar financial instrument is cleared or if a payment is made using a relevant system or inter-bank transfer or other electronic means.

100.5 Subject to the rights attaching to any shares:

100.5.1 any dividends or other monies payable on or in respect of a share may be declared or paid in such currency or currencies and using such exchange rate or such date for determining the value or currency conversions as the directors may determine; and

100.5.2 the directors can decide that a Depositary should receive dividends in a currency other than the currency in which they were declared and can make arrangements accordingly. In particular, if a Depositary has chosen or agreed to receive dividends in another currency, the directors can make arrangements with the Depositary for payment to be made to the Depositary for value on the date on which the relevant dividend is paid, or a later date decided by the directors.

101. **RIGHT TO CEASE SENDING PAYMENT AND UNCLAIMED PAYMENTS**

101.1 The Company may cease to send any cheque or warrant, or to use any other method of payment, for any dividend payable in respect of a share if:

101.1.1 in respect of at least two consecutive dividends payable on that share the cheque or warrant has been returned undelivered or remains uncashed, or another method of payment has failed;

101.1.2 in respect of one dividend payable on that share, the cheque or warrant has been returned undelivered or remains uncashed, or another method of payment has failed, and reasonable enquiries have failed to establish any new address or account of the recipient; or

101.1.3 a recipient does not specify an address, or does not specify an account of a type prescribed by the directors, or other details necessary in order to make a payment of a dividend by the means by which the directors have decided in accordance with these articles that a payment is to be made, or by which the recipient has elected to receive payment, and such address or details are necessary in order for the company to make the relevant payment in accordance with such decision or election,

but, subject to the provisions of these articles, the Company may recommence sending cheques or warrants, or using another method of payment, for dividends payable on that share if the person or persons entitled so request and have supplied in writing a new address or account to be used for that purpose.

101.2 In cases where the Company makes a payment of a dividend or other sum which is a distribution in accordance with these articles and that payment is rejected or refunded, the Company may credit that dividend or other money payable in cash to an account of the Company, to be held until the relevant recipient (or, in the case of joint recipients, all joint recipients) nominates a valid address or account to which the payment shall be made. If the Company does this, it will not be a trustee of the money and will not be liable to pay interest on it and any amount credited to an account of the Company is to be treated as having been paid to the relevant recipient (or, in the case of joint recipients, all joint recipients) at the time it is credited to that account.

102. NO INTEREST ON DIVIDENDS

No dividend or other money payable in respect of a share shall bear interest against the Company, unless otherwise provided by the rights attached to the share.

103. FORFEITURE OF UNCLAIMED DIVIDENDS

103.1 Any dividend or other money payable in respect of a share which has remained unclaimed for 12 years from the date when it became due for payment shall be forfeited (unless the directors decide otherwise) and shall cease to remain owing by the Company and the Company shall not be obliged to account to, or be liable in any respect to, the recipient or person who would have been entitled to the amount.

103.2 If the Company sells the share under article 39 and two years have passed following the sale of the share, any dividend or other money payable in respect of the share outstanding at the time of sale shall be forfeited and the Company shall not be obliged to account to, or be liable in any respect to, the recipient or person who would have been entitled to the amount.

104. SCRIP DIVIDENDS

The directors may, with the authority of an ordinary resolution of the Company, offer any holders of ordinary shares the right to elect to receive new ordinary shares, credited as fully paid, instead of cash in respect of the whole (or some part, to be determined by the directors) of any dividend specified by the ordinary resolution. The following provisions shall apply:

104.1 The resolution may specify a particular dividend or dividends (whether or not declared), or may specify any, some or all dividends declared or payable within a specified period, but such period must not end later than the end of the third annual general meeting following the date of the meeting at which the ordinary resolution is passed.

104.2 The directors may offer such rights of election to holders either:

104.2.1 in respect of the next dividend proposed to be paid; or

104.2.2 in respect of that dividend and all subsequent dividends, until such time as the election is revoked by the Company or the authority given pursuant to article 104.1 expires without being renewed (whichever is the earlier).

104.3 The entitlement of each holder of ordinary shares to new ordinary shares shall be such that the relevant value of the entitlement shall be as nearly as possible equal to (but not greater than) the cash amount (disregarding any tax credit) that such holder would have received by way of dividend. For this purpose "relevant value" shall be calculated by reference to the average of the middle market quotations for the Company's ordinary shares as derived from the NASDAQ daily list, for the day on which the ordinary shares are first quoted "ex" the relevant dividend and the four subsequent dealing days, or in such other manner as may be determined by or in accordance with the ordinary resolution. A certificate or report by the auditors as to the amount of the relevant value in respect of any dividend shall be conclusive evidence of that amount.

104.4 No fraction of a share shall be allotted and the directors may make such provision for fractional entitlements as they think fit, including provision:

104.4.1 for the whole or part of the benefit of fractional entitlements to be disregarded or to accrue to the Company; or

104.4.2 (for the value of fractional entitlements to be accumulated on behalf of a member (without entitlement to interest) and applied in paying up new shares in connection with a subsequent offer by the Company of the right to receive shares instead of cash in respect of a future dividend.

104.5 If the directors resolve to offer a right of election, they shall, after determining the basis of allotment, notify the holders of ordinary shares in writing of the right of election offered to them, and shall send with, or following, such notification, forms of election and specify the procedure to be followed and place at which, and the latest time by which, elections must be received in order to be effective. No notice need be given to a holder who has previously made (and has not revoked) an earlier election to receive new shares in place of all future dividends.

104.6 The directors may on any occasion decide that rights of election shall only be made available subject to such exclusions, restrictions or other arrangements as they shall in their absolute discretion deem necessary or desirable in order to comply with legal or practical problems under the laws of, or the requirements of any recognised regulatory body or stock exchange in, any territory.

104.7 The dividend (or that part of the dividend in respect of which a right of election has been given) shall not be payable on ordinary shares in respect of which an election has been duly made ("**the elected ordinary shares**"). Instead, additional ordinary shares shall be allotted to the holders of the elected ordinary shares on the basis of allotment determined as aforesaid. For such purpose the directors shall capitalise out of any amount for the time being standing to the credit of any reserve or fund (including any share premium account or capital redemption reserve) or any of the profits which could otherwise have been applied in paying dividends in cash, as the directors may determine, a sum equal to the aggregate nominal amount of the additional ordinary shares to be allotted on that basis and apply it in paying up in full the appropriate number of ordinary shares for allotment and distribution to the holders of the elected ordinary shares on that basis.

104.8 The directors shall not proceed with any election unless the Company has sufficient reserves or funds that may be capitalised to give effect to it after the basis of allotment is determined.

104.9 For the purposes of a scrip dividend authorised pursuant to this article 104 only, a resolution of the directors capitalising any profits of the Company not required for paying any preferential dividend (whether or not they are available for distribution) or any sum standing to the credit of any reserve or fund of the Company (including any share premium account, capital redemption reserve, merger reserve or revaluation reserve) shall have the same effect as if such capitalisation had been declared by ordinary resolution of the Company in accordance with article 105 and the directors may, in relation to any such capitalisation, exercise all of the powers conferred on them by article 105.

104.10 Unless the directors decide otherwise or the rules of a relevant system require otherwise, any new ordinary shares which a holder has elected to receive instead of cash in respect of some or all of his dividend will be:

104.10.1 shares in uncertificated form if the corresponding elected ordinary shares were uncertificated shares on the record date for that dividend; and

104.10.2 shares in certificated form if the corresponding elected ordinary shares were shares in certificated form on the record date for that dividend.

104.11 The additional ordinary shares when allotted shall rank pari passu in all respects with the fully paid ordinary shares then in issue except that they will not be entitled to participation in the dividend in lieu of which they were allotted.

104.12 The directors may do all acts and things which they consider necessary or expedient to give effect to any such capitalisation, and may authorise any person to enter on behalf of all the members interested into an agreement with the Company providing for such capitalisation and incidental matters and any agreement so made shall be binding on all concerned.

CAPITALISATION OF PROFITS

105. **CAPITALISATION OF PROFITS**

105.1 The directors may with the authority of an ordinary resolution of the Company:

105.1.1 subject as provided in this article 105, resolve to capitalise any profits of the Company not required for paying any preferential dividend (whether or not they are available for distribution) or any sum standing to the credit of any reserve or fund of the Company (including any share premium account, capital redemption reserve, merger reserve or revaluation reserve);

105.1.2 appropriate the sum resolved to be capitalised to the members in proportion to the nominal amounts of the shares (whether or not fully paid) held by them respectively which would (or in the case of treasury shares, which would if such shares were not held as treasury shares) entitle them to participate in a distribution of that sum if the shares were fully paid and the sum were then distributable and were distributed by way of dividend and apply such sum on their behalf either in or towards paying up the amounts, if any, for the time being unpaid on any shares held by them respectively, or in paying up in full shares or debentures of the Company of a nominal amount equal to that sum, and allot such shares or debentures credited as fully paid to those members or as they may direct, in those proportions, or partly in one way and partly in the other, but the share premium account, the capital redemption reserve, and any profits which are not available for distribution may, for the purposes of this article 105, only be applied in paying up shares to be allotted to members credited as fully paid;

105.1.3 resolve that any shares so allotted to any member in respect of a holding by him of any partly paid shares shall so long as such shares remain partly paid rank for dividend only to the extent that the latter shares rank for dividend;

105.1.4 make such provision by the issue of fractional certificates or other fractional entitlements (or by ignoring fractions) or by payment in cash or otherwise as they think fit in the case of shares or debentures becoming distributable in fractions (including provision whereby the benefit of fractional entitlements accrues to the Company rather than to the members concerned);

105.1.5 authorise any person to enter on behalf of all the members concerned into an agreement with the Company providing for the allotment to them respectively, credited as fully paid, of any further shares to which they are entitled upon such capitalisation, any agreement made under such authority being binding on all such members; and

105.1.6 generally do all acts and things required to give effect to such resolution as aforesaid.

105.2 Where, pursuant to an employees' share scheme (within the meaning of section 1166 of the Companies Act 2006):

105.2.1 the Company has granted options to subscribe for shares on terms which provide (inter alia) for adjustments to the subscription price payable on the exercise of such options or to the number of shares to be allotted upon such exercise in the event of any increase or reduction in or other reorganisation of the Company's issued share capital and an otherwise appropriate adjustment would result in the subscription price for any share being less than its nominal value, then the directors may, on the exercise of any of the options concerned and payment of the subscription price which would have applied had such adjustment been made, capitalise any such profits or other sum as is mentioned in article 105.1.1 above to the extent necessary to pay up the unpaid balance of the nominal value of the shares which fall to be allotted on the exercise of such options and apply such amount in paying up such balance and allot shares fully paid accordingly; or

105.2.2 the Company has granted (or assumed liability to satisfy) rights to subscribe for shares (whether in the form of stock options, stock units, restricted stock, stock appreciation rights, performance shares and units, dividend equivalent rights or otherwise) then the directors may, in connection with the issue of shares, capitalise any such profits or other sum as is mentioned in article 105.1.1 above to the extent necessary to pay up the unpaid balance of the nominal value of the shares which fall to be issued in connection with such rights to subscribe and apply such amount in paying up such balance and allot shares fully paid accordingly.

105.3 The provisions of articles 105.1.1 to 105.1.6 above shall apply with the necessary alterations to this article 105.3 (but as if the authority of an ordinary resolution of the Company were not required).

105.4 This article 105.4 (which is without prejudice to the generality of the provisions of articles 105.1 and 105.2) applies where:

105.4.1 the board has established a Rights Plan and has granted Rights in accordance therewith as provided in articles 5.1 and 5.2 above; and

105.4.2 the board has exercised any discretion which may be conferred upon it by any Rights Plan so established to exchange or cause to be exchanged all or part of the Rights (other than Rights held by or on behalf of an Acquiring Person, which would have become void) for ordinary shares or shares of another class or series or all or any of them.

For the purposes of giving effect to any such exchange as is referred to in article 105.4.2, the board may:

105.4.3 resolve to capitalise an amount standing to the credit of reserves (including a share premium account, capital redemption reserve and profit and loss account), whether or not available for distribution, being an amount equal to the nominal amount of the shares or the other shares which are to be exchanged for the Rights (other than Rights held by or on behalf of an Acquiring Person) or both; and

105.4.4 apply that sum in paying up in full shares and allot such shares, credited as fully paid, to: (i) the holders of Rights (other than an Acquiring Person); or (ii) a Depositary (including, for the avoidance of doubt, to a nominee of a Depositary) in exchange for the Rights (other than Rights held by or on behalf of an Acquiring Person); or (iii) both.

105.5 The provisions of articles 105.1.4 and 105.1.5 shall apply (mutatis mutandis) to any resolution of the board pursuant to article 105.4 as they apply to any resolution of the board pursuant to article 105.1.

RECORD DATES FOR PAYMENTS AND ISSUE

106. COMPANY OR DIRECTORS MAY FIX RECORD DATES FOR PAYMENTS AND ISSUE

Notwithstanding any other provision of these articles, but without prejudice to the rights attached to any shares, the Company or the directors may fix a date and time as the record date by reference to which persons registered as holders of shares or other securities shall be entitled to receipt of any dividend, distribution, allotment or issue, and that date may be before, on or after the date on which the dividend, distribution, allotment or issue is declared, paid or made, and where such a record date is fixed, references in these articles to a holder of shares or member to whom a dividend is to be paid or a distribution, allotment or issue is to be made shall be construed accordingly;

NOTICES AND OTHER COMMUNICATIONS

107. REQUIREMENTS FOR WRITING

Any notice to be given to or by any person pursuant to these articles shall be in writing other than a notice calling a meeting of the directors which need not be in writing.

108. METHODS OF SENDING OR SUPPLYING

108.1 Any notice, document or information may (without prejudice to articles 111 and 112) be sent or supplied by the Company to any member:

108.1.1 by hand, that is by any person (including a courier or process server) handing it to the member or leaving it at the member's registered address or postal address given pursuant to article 108.4;

108.1.2 by sending it by post in a prepaid envelope addressed to the member at his registered address or postal address given pursuant to article 108.4;

108.1.3 by sending it in electronic form to a person who has agreed (generally or specifically) that the notice, document or information may be sent or supplied in that form (and has not revoked that agreement);

108.1.4 by making it available on a website, provided that the requirements in article 108.2 and the provisions of the Acts are satisfied;

108.1.5 through a relevant system; or

108.1.6 in some other way authorised in writing by the relevant member.

108.2 The requirements referred to in article 108.1.4 are that:

108.2.1 the member has agreed (generally or specifically) that the notice, document or information may be sent or supplied to him by being made available on a website (and has not revoked that agreement), or the member has been asked by the Company to agree that the Company may send or supply notices, documents and information generally, or the notice, document or information in question, to him by making it available on a website and the Company has not received a response within the period of 28 days beginning on the date on which the Company's request was sent and the member is therefore taken to have so agreed (and has not revoked that agreement);

108.2.2 the member is sent a notification of the presence of the notice, document or information on a website, the address of that website, the place on that website where it may be accessed, and how it may be accessed ("**notification of availability**");

108.2.3 in the case of a notice of meeting, the notification of availability states that it concerns a notice of a company meeting, specifies the place, time and date of the meeting, and states whether it will be an annual general meeting; and

108.2.4 the notice, document or information continues to be published on that website, in the case of a notice of meeting, throughout the period beginning with the date of the notification of availability and ending with the conclusion of the meeting and in all other cases throughout the period specified by any applicable provision of the Acts, or, if no such period is specified, throughout the period of 28 days beginning with the date on which the notification of availability is sent to the member, save that if the notice, document or information is made available for part only of that period then failure to make it available throughout that period shall be disregarded where such failure is wholly attributable to circumstances which it would not be reasonable to have expected the Company to prevent or avoid.

108.3 In the case of joint holders:

108.3.1 it shall be sufficient for all notices, documents and other information to be sent or supplied to the joint holder whose name stands first in the register of members in respect of the joint holding only; and

108.3.2 the agreement of the joint holder whose name stands first in the register of members in respect of the joint holding that notices, documents and information may be sent or supplied in electronic form or by being made available on a website shall be binding on all the joint holders.

108.4 A member whose registered address is not within the United States of America shall not be entitled to receive any notice, document or information from the Company unless he gives to the Company an address (not being an electronic address) within the United States of America at which notices, documents or information may be sent or supplied to him.

108.5 In the case of a member registered on a branch register, any notice, document or other information can be posted or despatched in the United States of America or in the country where the branch register is kept.

108.6 For the avoidance of doubt, the provisions of this article 108 are subject to article 43.

108.7 The Company may at any time and at its sole discretion choose to send or supply notices, documents and information only in hard copy form to some or all members.

109. DEEMED RECEIPT OF NOTICE

A member present either in person or by proxy at any meeting of the Company or of the holders of any class of shares shall be deemed to have received notice of the meeting and, where requisite, of the purposes for which it was called.

110. COMPANY OR DIRECTORS MAY FIX RECORD DATES FOR NOTICES

110.1 The Company or the directors may fix a date and time as the record date by reference to which persons registered as holders of shares or other securities shall be entitled to receive any notice or other document to be given to members and no change in the register after that time shall invalidate the giving of the notice or document, provided that in the case of a notice of general meeting or the annual accounts and reports of the Company, such record date shall be within the period of 21 days before the day the notice or document is sent.

110.2 Every person who becomes entitled to a share shall be bound by any notice in respect of that share which, before his name is entered in the register of members, has been given to the person from whom he derives his title.

111. NOTICE WHEN POST NOT AVAILABLE

Where, by reason of any suspension or curtailment of postal services, the Company is unable effectively to give notice of a general meeting, or meeting of the holders of any class of shares, the board may decide that the only persons to whom notice of the affected general meeting must be sent are: the directors; the Company's auditors; those members to whom notice to convene the general meeting can validly be sent by electronic means and those members to whom notification as to the availability of the notice of meeting on a website can validly be sent by electronic means. In any such case the Company shall also:

111.1.1 advertise the general meeting in at least two national daily newspapers published in the United States of America; and

111.1.2 send or supply a confirmatory copy of the notice to members in the same manner as it sends or supplies notices under article 108 if at least seven clear days before the meeting the posting of notices again becomes practicable.

112. OTHER NOTICES AND COMMUNICATIONS ADVERTISED IN NATIONAL NEWSPAPER

Any notice, document or information to be sent or supplied by the Company to the members or any of them, not being a notice of a general meeting, shall be sufficiently sent or supplied if sent or supplied by advertisement in at least one national daily newspaper published in the United States of America.

113. WHEN NOTICE OR OTHER COMMUNICATION DEEMED TO HAVE BEEN RECEIVED

Any notice, document or information sent or supplied by the Company to the members or any of them:

113.1.1 by hand, shall be deemed to have been received on the day it was handed to the member or left at the member's registered address or postal address given pursuant to article 108.4;

113.1.2 by post, shall be deemed to have been received 24 hours after the time at which the envelope containing the notice, document or information was posted unless it was sent by second class post, or there is only one class of post, or it was sent by air mail to an address outside the United States of America, in which case it shall be deemed to have been received 48 hours after it was posted, and proof that the envelope was properly addressed, prepaid and posted shall be conclusive evidence that the notice, document or information was sent;

113.1.3 by electronic means, shall be deemed to have been received 24 hours after it was sent. Proof that a notice, document or information in electronic form was addressed to the electronic address provided by the member for the purpose of receiving communications from the Company shall be conclusive evidence that the notice, document or information was sent;

113.1.4 by making it available on a website, shall be deemed to have been received on the date on which notification of availability on the website is deemed to have been received in accordance with this article 113 or, if later, the date on which it is first made available on the website;

113.1.5 by means of a relevant system, shall be deemed to have been received 24 hours after the Company or any sponsoring system-participant acting on the Company's behalf, sends the issuer-instruction relating to the notice, document or information;

113.1.6 by any other means specified in a written authorisation from the relevant member, shall be deemed to have been received when the Company has done what it was authorised to do by that member; and

113.1.7 by advertisement, shall be deemed to have been received on the day on which the advertisement appears.

114. COMMUNICATIONS SENT OR SUPPLIED TO PERSONS ENTITLED BY TRANSMISSION

114.1 If a person who claims to be entitled to a share in consequence of the death or bankruptcy of a holder or otherwise by operation of law supplies to the Company:

114.1.1 such evidence as the directors may reasonably require to show his title to the share; and

114.1.2 an address within the United States of America at which notices, documents or information may be sent or supplied to such person,

then such a person shall be entitled to have sent or supplied to him at such address any notice, document or information to which the relevant holder would have been entitled if the death or bankruptcy or any other event giving rise to an entitlement to the share by law had not occurred.

114.2 Until a person entitled to the share has complied with article 114.1, any notice, document or information may be sent or supplied to the relevant holder in any manner authorised by these articles, as if the death or bankruptcy or any other event giving rise to an entitlement to the share by law had not occurred. This shall apply whether or not the Company has notice of the death or bankruptcy or other event.

115. POWER TO STOP SENDING COMMUNICATIONS TO UNTRACED MEMBERS

If on three consecutive occasions notices, documents or information sent or supplied to a member have been returned undelivered, the member shall not be entitled to receive any subsequent notice, document or information until he has supplied to the Company (or its agent) a new registered address, or a postal address within the United States of America, or (without prejudice to article 108.4) shall have informed the Company, in such manner as may be specified by the Company, of an electronic address. For the purposes of this article 115, references to notices, documents or information include references to a cheque or other instrument of payment; but nothing in this article 115 shall entitle the Company to cease sending any cheque or other instrument of payment for any dividend, unless it is otherwise so entitled under these articles.

116. VALIDATION OF DOCUMENTS IN ELECTRONIC FORM

116.1 Where a document is required under these articles to be signed by a member or any other person, if the document is in electronic form, then in order to be valid the document must:

116.1.1 incorporate the electronic signature, or personal identification details (which may be details previously allocated by the Company), of that member or other person, in such form as the directors may approve; or

116.1.2 be accompanied by such other evidence as the directors may require in order to be satisfied that the document is genuine.

116.2 The Company may designate mechanisms for validating any such document and a document not validated by the use of any such mechanisms shall be deemed as having not been received by the Company. In the case of any document or information relating to a meeting, an instrument of proxy or invitation to appoint a proxy, any validation requirements shall be specified in the relevant notice of meeting in accordance with articles 42 and 64.

117. OVERSEAS BRANCH REGISTERS

The Company, or the directors on behalf of the Company, may cause to be kept in any territory an overseas branch register of members resident in such territory, and the directors may make, and vary, such arrangements as they may think fit in relation to the keeping of any such register.

118. **MAKING AND RETENTION OF MINUTES**

118.1 The directors shall cause minutes to be made, in books kept for the purpose of:

118.1.1 all appointments of officers made by the directors; and

118.1.2 all proceedings at meetings of the Company, of the holders of any class of shares in the Company, and of the directors, and of committees of the directors, including the names of the directors present at each such meeting.

118.2 Minutes shall be retained for at least ten years from the date of the appointment or meeting and shall be kept available for inspection in accordance with the Acts.

119. **INSPECTION OF ACCOUNTS**

Except as provided by statute or by order of the court or authorised by the directors or an ordinary resolution of the Company, no person is entitled to inspect any of the Company's accounting or other records or documents merely by virtue of being a member.

120. **APPOINTMENT OF SECRETARY**

The secretary shall be appointed by the directors for such term, at such remuneration and upon such other conditions as they think fit; and any secretary so appointed may be removed by them.

121. **USE OF THE SEAL**

The seal shall be used only by the authority of a resolution of the directors or of a committee of the directors. The directors may determine whether any instrument to which the seal is affixed shall be signed and, if it is to be signed, who shall sign it. Unless otherwise determined by the directors:

121.1.1 share certificates and, subject to the provisions of any instrument constituting the same, certificates issued under the seal in respect of any debentures or other securities, need not be signed and any signature may be applied to any such certificate by any mechanical or other means or may be printed on it;

121.1.2 every other instrument to which the seal is affixed shall be signed by

(A) two directors of the Company;

(B) one director and the secretary of the Company; or

(C) at least one authorised person in the presence of a witness who attests the signature. For this purpose an authorised person is any director of the Company or the secretary of the Company, or any person authorised by the directors for the purpose of signing instruments to which the seal is affixed.

122. **OFFICIAL SEAL FOR USE ABROAD**

The Company may have an official seal for use in accordance with the Acts. Such a seal shall be used only by the authority of a resolution of the directors or of a committee of the directors.

123. **CHANGE OF NAME**

The Company may change its name by resolution of the directors.

124. **WINDING UP**

If the Company is wound up, the liquidator may, with the sanction of a special resolution and any other sanction required by law, divide among the members in specie the whole or any part of the assets of the Company and may, for that purpose, value any assets and determine how the division shall be carried out as between the members or different classes of members. The liquidator may, with the like sanction, vest the whole or any part of the assets in trustees upon such trusts for the benefit of the members as he may with the like sanction determine, but no member shall be compelled to accept any assets upon which there is a liability.

125. **POWER TO INDEMNIFY DIRECTORS**

125.1 Subject to article 125.2, the Company:

125.1.1 may indemnify to any extent any person who is or was a director, or a director of any associated company, directly or indirectly (including by funding any expenditure incurred or to be incurred by him) against any loss or liability, whether in connection with any proven or alleged negligence, default, breach of duty or breach of trust by him or otherwise, in relation to the Company or any associated company;

125.1.2 may indemnify to any extent any person who is or was a director of an associated company that is a trustee of an occupational pension scheme, directly or indirectly (including by funding any expenditure incurred or to be incurred by him) against any liability incurred by him in connection with the company's activities as trustee of an occupational pension scheme; and

125.1.3 may purchase and maintain insurance for any person who is or was a director, or a director of any associated company, against any loss or liability or any expenditure he may incur, whether in connection with any proven or alleged negligence, default, breach of duty or breach of trust by him or otherwise, in relation to the Company or any associated company,

and for this purpose an associated company means any body corporate which is or was a subsidiary undertaking of the Company or in which the Company or any subsidiary undertaking of the Company is or was interested.

125.2 This article 125 does not authorise any indemnity which would be prohibited or rendered void by any provision of the Acts or by any other provision of law.

APPENDIX 1

SUMMARY OF EXAMPLE TERMS
RIGHTS TO PURCHASE SHARES OF ARRIS INTERNATIONAL PLC

Subject to the provisions of the Companies Act 2006 and every other enactment from time to time in force concerning companies (including any orders, regulations or other subordinate legislation made under the Companies Act 2006 or any such other enactment), so far as they apply to or affect ARRIS International Plc (the **"Company"**), the board of directors of the Company (the **"Board"**) may exercise any power of the Company to establish a shareholders rights plan (the **"Rights Plan"**). The Rights Plan may be in such form as the Board shall in its absolute discretion decide and may in particular (but without restriction or limitation) include such terms as are described in this Summary of Example Terms.

Pursuant to the Rights Plan, the Board would declare and issue one share purchase right (a **"Right"**) for each issued share of the Company (the **"Ordinary Shares"**). Each Right would entitle the registered holder, upon payment to the Company of the price per Right specified in the Rights Plan, to have delivered to such holder Ordinary Shares, or shares of any other class or series as specified in the Rights Plan (a **"Share"**), subject to adjustment.

Until the earlier to occur of: (i) 10 days following a public announcement that a person or group of affiliated or associated persons or persons acting in concert (a **"group"**) has acquired beneficial ownership of or an interest in 20% or more of the issued Ordinary Shares (such person or group, an **"Acquiring Person"**); and (ii) 10 business days (or such later date as may be determined by action of the Board prior to such time as any person or group were to become an Acquiring Person) following the commencement of, or announcement of an intention to make, a takeover offer by a person or group the consummation of which would result in the beneficial ownership of or an interest in 20% or more of the issued Ordinary Shares (without duplication) being acquired by that person or group (the earlier of such dates being called the **"Distribution Date"**), each Right would be associated with an individual Ordinary Share, as applicable, and the Rights would be transferred with and only with the Ordinary Shares, as applicable.

After the Distribution Date, separate certificates evidencing the Rights (**"Right Certificates"**) would be mailed to (or credited to the account of) holders of record of the Ordinary Shares (without duplication) as of the close of business on the Distribution Date. Such separate Right Certificates alone would then evidence the Rights and the Rights would then be separately transferable.

The Rights would not be exercisable until the Distribution Date. The Rights would expire on a date to be specified in the Rights Plan, unless the Rights were earlier redeemed or exchanged by the Company.

After the Distribution Date, each holder of a Right, other than Rights held by or on behalf of any Acquiring Person (which would thereupon become void), would thereafter have the right to receive upon exercise of a Right that number of Shares having a market value of two times the exercise price for the Right.

If, after a person or group were to become an Acquiring Person, the Company were to be acquired by a third party (including an Acquiring Person) in a securities exchange, proper provisions would be made so that each holder of a Right (other than Rights held by or on behalf of an Acquiring Person, which would have become void) would thereafter have the right to receive upon the exercise of a Right that number of shares of such third party (including an Acquiring Person) or its parent that at the time of such acquisition would have a market value of two times the exercise price of the Right.

At any time after any person or group were to become an Acquiring Person and prior to the acquisition by such Acquiring Person of an interest in 50% or more of the outstanding Ordinary Shares (without duplication), the Board would have the authority to exchange or cause to be exchanged the Rights (other than Rights held by or on behalf of such Acquiring Person, which would have become void), in whole or in part, for Shares at an exchange ratio of one Share per Right, subject to the receipt of any consideration required by applicable law to be received by the Company in respect of the same.

At any time before any person or group were to become an Acquiring Person, the Board would have the authority to redeem the Rights in whole, but not in part, at a price per Right to be specified in the Rights Plan (the **"Redemption Price"**).

Prior to the time that any person or group became an Acquiring Person, the Board would have the authority, except with respect to the Redemption Price, to amend the Rights Plan in any manner, subject to applicable law and any restrictions set forth in the articles of the Company. After any person or group became an Acquiring Person, the Board would have the authority, except with respect to the Redemption Price, to amend the Rights Plan in any manner that would not adversely effect the interests of holders of the Rights (other than Rights held by or on behalf of any Acquiring Person, which would have become void).

Prior to the exercise of a Right, a Right would not entitle the holder thereof to any rights as a shareholder of the Company including, without limitation, the right to vote or receive dividends in respect of such Right.

Exhibit 4.1

ARRIS

PO BOX 43004, Providence, RI 02940-3004

MR A SAMPLE
DESIGNATION (IF ANY)
ADD 1
ADD 2
ADD 3
ADD 4

CUSIP			XXXXXX XX X
Holder ID			XXXXXXXXXX
Insurance Value			1,000,000.00
Number of Shares			123456
DTC	12345678		123456789012345
Certificate Numbers	**Num/No.**	**Denom.**	**Total**
1234567890/1234567890	1	1	1
1234567890/1234567890	2	2	2
1234567890/1234567890	3	3	3
1234567890/1234567890	4	4	4
1234567890/1234567890	5	5	5
1234567890/1234567890	6	6	6
Total Transaction			7

ZQ|CERT#|COY|CLS|RGSTRY|ACCT#|TRANSTYPE|RUN#|TRANS#

ORDINARY SHARES

NOMINAL VALUE £0.01

ORDINARY SHARES

THIS CERTIFICATE IS TRANSFERABLE IN CANTON, MA, JERSEY CITY, NJ AND COLLEGE STATION, TX

Certificate Number
ZQ00000000

ARRIS

Shares
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****000000****************
*****000000***************
******000000**************

ARRIS INTERNATIONAL PLC

INCORPORATED UNDER THE LAWS OF ENGLAND AND WALES WITH COMPANY NUMBER 09551763

THIS CERTIFIES THAT MR. SAMPLE & MRS. SAMPLE & MR. SAMPLE & MRS. SAMPLE

CUSIP G0551A 10 3

SEE REVERSE FOR CERTAIN DEFINITIONS

is the owner of ***ZERO HUNDRED THOUSAND ZERO HUNDRED AND ZERO***

FULLY-PAID AND NON-ASSESSABLE SHARES OF ORDINARY SHARES OF

ARRIS International plc transferable in accordance with, and subject to, the Company's articles of association on the books of the Company in person or by duly authorized attorney upon surrender of this certificate properly endorsed. This certificate is not valid unless countersigned by the Transfer Agent and registered by the Registrar.

Witness the facsimile signatures of its duly authorized officers.

Chairman and CEO

SVP, General Counsel and Secretary

DATED DD-MMM-YYYY

COUNTERSIGNED AND REGISTERED:
COMPUTERSHARE TRUST COMPANY, N.A.
TRANSFER AGENT AND REGISTRAR,

By ____________________
AUTHORIZED SIGNATURE

SECURITY INSTRUCTIONS ON REVERSE

A123456

ARRIS INTERNATIONAL PLC

A FULL STATEMENT OF THE POWERS, DESIGNATIONS, PREFERENCES AND RELATIVE, PARTICIPATING, OPTIONAL OR OTHER SPECIAL RIGHTS OF EACH CLASS OF SHARES OF THE COMPANY OR SERIES THEREOF AND THE QUALIFICATIONS, LIMITATIONS OR RESTRICTIONS OF SUCH PREFERENCES AND/OR RIGHTS WILL BE FURNISHED BY THE COMPANY WITHOUT CHARGE TO ANY SHAREHOLDER WHO SO REQUESTS UPON APPLICATION TO THE TRANSFER AGENT NAMED ON THE FACE HEREOF OR TO THE OFFICE OF THE SECRETARY OF THE COMPANY. THE TRANSFER OF THESE SHARES REPRESENTED BY THIS CERTIFICATE REQUIRES THE COMPLETION OF A SPECIALIZED STOCK TRANSFER FORM AND MAY BE SUBJECT TO THE UNITED KINGDOM'S HM REVENUE AND CUSTOMS STAMP DUTY. PLEASE CONTACT THE TRANSFER AGENT FOR ADDITIONAL INFORMATION.

For US purposes the following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM	- as tenants in common	UNIF GIFT MIN ACT	-..Custodian .... (Cust) (Minor)
TEN ENT	- as tenants by the entireties		under Uniform Gifts to Minors Act.. (State)
JT TEN	- as joint tenants with right of survivorship and not as tenants in common	UNIF TRF MIN ACT	-..Custodian (until age ....) (Cust)
			..............................under Uniform Transfers to Minors Act .... (Minor) (State)

Additional abbreviations may also be used though not in the above list.

PLEASE INSERT SOCIAL SECURITY OR OTHER IDENTIFYING NUMBER OF ASSIGNEE

For value received, ___________________________hereby sell, assign and transfer unto

____

(PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS, INCLUDING POSTAL ZIP CODE, OF ASSIGNEE)

____

____

____ Shares

of the Ordinary shares represented by the within Certificate, and do hereby irrevocably constitute and appoint

____ Attorney

to transfer the said stock on the books of the within-named Company with full power of substitution in the premises.

Dated: ____20_________________

Signature: ____

Signature: ____

Notice: The signature to this assignment must correspond with the name as written upon the face of the certificate, in every particular, without alteration or enlargement, or any change whatever.

Signature(s) Guaranteed: Medallion Guarantee Stamp

THE SIGNATURE(S) SHOULD BE GUARANTEED BY AN ELIGIBLE GUARANTOR INSTITUTION (Banks, Stockbrokers, Savings and Loan Associations and Credit Unions) WITH MEMBERSHIP IN AN APPROVED SIGNATURE GUARANTEE MEDALLION PROGRAM, PURSUANT TO S.E.C. RULE 17Ad-15.

SECURITY INSTRUCTIONS

THIS IS WATERMARKED PAPER. DO NOT ACCEPT WITHOUT NOTING WATERMARK. HOLD TO LIGHT TO VERIFY WATERMARK.

The IRS requires that the named transfer agent ("we") report the cost basis of certain shares or units acquired after January 1, 2011. If your shares or units are covered by the legislation, and you requested to sell or transfer the shares or units using a specific cost basis calculation method, then we have processed as you requested. If you did not specify a cost basis calculation method, then we have defaulted to the first in, first out (FIFO) method. Please consult your tax advisor if you need additional information about cost basis.

If you do not keep in contact with the issuer or do not have any activity in your account for the time period specified by state law, your property may become subject to state unclaimed property laws and transferred to the appropriate state.

1234567

Exhibit 21

ARRIS International plc & Subsidiaries
(as of February 29, 2016)

- ARRIS International plc, (UK), stock is publicly traded
  - ARRIS Financing II S.á r.L (Luxembourg)
    - ARRIS Ireland Financing Unlimited Company
  - ARRIS US. Holdings, Inc. (Delaware)
    - ARRIS Group Inc., (Delaware)
      - ARRIS Technology, Inc. (Delaware)
        - ARRIS Enterprises LLC (Delaware)
          - ARRIS Solutions, Inc. (Delaware)
            - ARRIS Group de Mexico S.A. de C.V. (Mexico)
            - ARRIS Group Europe Holding B.V. (Netherlands)
              - ARRIS Group B.V. (Netherlands)
                - France Branch
                - U.K. Branch
              - ARRIS International Iberia S.L. (Spain)
                - Portugal Branch
            - C-COR Argentina S.R.L. (Argentina)
            - BigBand Networks, Inc. (Delaware)
            - ARRIS Broadband Solutions, Ltd. (Israel)
            - C-COR Solutions Pvt. Ltd. (India) — dormant
            - Worldbridge Broadband Services S. de R.L. e C.V. (Mexico) — dormant
            - ANTEC International Corporation (Barbados) — dormant
          - ARRIS Global Services, Inc., (Delaware)
          - ARRIS Telecomunicações do Brasil Ltda (Brasil)
          - ARRIS Group Japan K.K. (Japan)
          - ARRIS Communications Ireland Limited (Ireland)
          - ARRIS Technology (Shenzhen) Co., Ltd. (China)
            - Beijing Branch
          - Power Guard, Inc., (Illinois) — dormant
        - Jerrold DC Radio, Inc.
        - ARRIS Group Australia Pty. Ltd. (Australia)
        - ARRIS de Argentina S.A. (Argentina)
        - ARRIS France S.A.S. (France)
        - ARRIS Hong Kong Limited (Hong Kong)
        - ARRIS Telecomunicaciones Chile Ltda. (Chile)
        - ARRIS de Colombia S.A.S. (Colombia)
        - General Instrument Japan K.K. (Japan)
        - ARRIS Group Korea, Inc. (Korea)
        - ARRIS de Mexico S.A. de C.V. (Mexico)
        - ARRIS de Peru SRL (Peru)
        - ARRIS Poland Sp. z o.o. (Poland)
        - ARRIS Singapore Pte. Ltd. (Singapore)
        - ARRIS Solutions Spain S.L. (Spain)
        - Malaysian branch of ARRIS Technology, Inc.
        - ARRIS Solutions Malaysia SDN BHD (Malaysia)
        - Terayon Cayman Ltd.
        - ARRIS India Private Limited (India)
  - ARRIS Holdings S.à r.L (Luxembourg)
    - ARRIS Financing S.à r.L (Luxembourg)
      - U.S. Branch
      - ARRIS Scotland L.P. (U.K.)

- ARRIS Solutions U.K., Ltd. (U.K.)
  - U.A.E. Branch, Dubai
  - ARRIS Sweden A.B. (Sweden)
  - ARRIS Hangzhou Holding Ltd. (Hong Kong)
    - ARRIS Technology (Hangzhou) Ltd. (China)
      - Beijing Branch
      - Shanghai Branch
  - ARRIS Taiwan, Ltd. (Taiwan)
  - ARRIS Canada, Inc. (Canada)
  - ARRIS Solutions Germany GmbH (Germany)
  - GIC International Capital LLC (Delaware)
  - GIC International Holdco LLC (Delaware)
    - ARRIS New Zealand Ltd. (New Zealand)
    - ARRIS Belgium BVBA (Belgium)
    - ARRIS del Ecuador S.A. (Ecuador)
    - ARRIS de Guatemala S.A. (Guatemala)
    - General Instrument Czech Republic S.R.O. (Czech Republic)
    - ARRIS Solutions Portugal Unipessoal Ltd. (Portugal)
    - General Instrument Switzerland GmbH (Switzerland)
    - ARRIS Telekomunikasyon Cihazlari Limited Sirketi (Turkey)
    - Motorola Mobility Vietnam LLC (Vietnam)
    - ARRIS Group Russia LLC (Russia)

Pace Ltd. (UK)
- Pace Australia Pty. Ltd. (Australia)
- Pace Micro Technology (India) Private Limited (India)
- Pace Asia Pacific Ltd. (Hong Kong)
  - Pace China Operations (China)
- Latens Systems Ltd. (UK — N. Ireland)
  - Latens Services Ltd. (UK — N. Ireland)
  - Latens Systems Israel Ltd. (Israel)
  - Latens Systems LLC (Georgia)
  - Latens Systems (India) Private Limited (India)
- Pace Software and Services Ltd. (UK)
- Pace Micro Technology GmbH (Germany)
- Pace Netherlands B.V. (Netherlands)
- Pace Micro Technology Ltd. (UK)
- Pace France S.A.S.
  - Pace Asia Home Networks Sdn. Bhd. (Malaysia)
  - Pace Iberia S.L.U. (Spain)
  - Pace International Finance Ltd. (UK)
    - Pace Brasil — Industria Electronica e Comercio Ltda. (Brazil)
- Pace Advanced Consumer Electronics Ltd. (UK)
- Pace East Trading Ltd. (UK)
- Pace International ME FZE (U.A.E.)
- Pace International Luxembourg S.à r.L (Luxembourg)
  - US Branch
- Pace Distribution (Overseas) Ltd. (UK)
  - Pace Europe S.A.S. (France)
  - Pace Americas Ltd. (UK)
  - Pace Overseas Distribution Ltd. (UK)
    - Pace Overseas South Africa (Pty) Ltd. (S. Africa)
- Pace Americas Holdings, Inc. (Delaware)
  - Pace Americas Investments LLC (Delaware)
    - 2Wire, Inc. (Delaware)
      - 2Wire (B.C.) Limited (Canada)
      - Kenati Technologies, Inc. (Delaware)
      - 2Wire Develeopment Center Private Limited (India)

            - 2Wire International Ltd. (UK)
            - 2Wire Asia Pacific Limited (Hong Kong)
            - 2Wire Singapore Pte. Ltd. (Singapore)
                - Taiwan Rep Office
        - Pace Americas LLC (Delaware)
            - Pace USA LLC (Delaware)
            - STB Anchor Mexicana S.A. de C.V. (Mexico)
    - Aurora Networks, Inc. (Delaware)
        - Aurora Networks Holdings Cayman (Cayman)
        - Aurora Networks Canada, Inc. (Canada)
        - Aurora Networks International LLC (Delaware)
            - UK Branch
            - China Rep Office

Exhibit 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

(1) Registration Statement No. 333-208849 on Form S-8 (Pace Sharesave Plan)

(2) Registration Statement No. 333-208848 on Form S-8 (Broadband Parent Corporation 2001 Stock Incentive Plan, ARRIS Group, Inc. 2004 Stock Incentive Plan, ARRIS Group, Inc. 2007 Stock Incentive Plan, ARRIS Group, Inc. 2008 Stock Incentive Plan, BigBand Networks, Inc. 2007 Equity Incentive Plan, ARRIS Group, Inc. Employee Savings Plan)

(3) Registration Statement No. 333-208847 on Form S-8 (ARRIS International plc Amended and Restated Employee Stock Purchase Plan)

(4) Registration Statement No. 333-208846 on Form S-8 (ARRIS International plc 2011 Stock Incentive Plan)

of our reports dated February 29, 2016, with respect to the consolidated financial statements of ARRIS Group, Inc., and the effectiveness of internal control over financial reporting of ARRIS Group, Inc., included in this Annual Report (Form 10-K) of ARRIS International plc for the year ended December 31, 2015.

/s/ Ernst & Young LLP

Atlanta, Georgia
February 29, 2016

Exhibit 24

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS that the undersigned director of ARRIS International plc, a company organized under the laws of England and Wales (the “Corporation”), which is about to file an annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, on Form 10-K, hereby constitutes and appoints Robert Stanzione, Patrick Macken and David Potts and each of them his or her true and lawful attorney-in-fact and agent, with full power and all capacities, to sign the Corporation’s Form 10-K and any and all amendments thereto, and any other documents in connection therewith, to be filed with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as she or he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or their substitutes may lawfully do or cause to be done by virtue hereof.

This power of attorney shall be valid for a period of 90 days from the date specified below.

This power of attorney shall be governed by and construed in accordance with English law.

IN WITNESS WHEREOF, this power of attorney has been executed as a deed by the undersigned and is intended to be and is hereby delivered on February 26, 2016.

/s/ Alex B. Best
Printed Name: Alex B. Best

In the presence of:

/s/ Patrick W. Macken
Signature of Witness
Name of Witness: Patrick W. Macken
Address: 3871 Lakefield Drive
Suwanee GA 30024
Occupation: Attorney

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS that the undersigned director of ARRIS International plc, a company organized under the laws of England and Wales (the "Corporation"), which is about to file an annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, on Form 10-K, hereby constitutes and appoints Robert Stanzione, Patrick Macken and David Potts and each of them his or her true and lawful attorney-in-fact and agent, with full power and all capacities, to sign the Corporation's Form 10-K and any and all amendments thereto, and any other documents in connection therewith, to be filed with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as she or he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or their substitutes may lawfully do or cause to be done by virtue hereof.

This power of attorney shall be valid for a period of 90 days from the date specified below.

This power of attorney shall be governed by and construed in accordance with English law.

IN WITNESS WHEREOF, this power of attorney has been executed as a deed by the undersigned and is intended to be and is hereby delivered on February 26, 2016.

/s/ Harry L. Bosco
Printed Name: Harry L. Bosco

In the presence of:

/s/ Judith Bosco
Signature of Witness
Name of Witness: Judith Bosco
Address: 269 Eagle Estate Drive
Debary, FL 32713
Occupation: Retired teacher

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS that the undersigned director of ARRIS International plc, a company organized under the laws of England and Wales (the “Corporation”), which is about to file an annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, on Form 10-K, hereby constitutes and appoints Robert Stanzione, Patrick Macken and David Potts and each of them his or her true and lawful attorney-in-fact and agent, with full power and all capacities, to sign the Corporation’s Form 10-K and any and all amendments thereto, and any other documents in connection therewith, to be filed with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as she or he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or their substitutes may lawfully do or cause to be done by virtue hereof.

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IN WITNESS WHEREOF, this power of attorney has been executed as a deed by the undersigned and is intended to be and is hereby delivered on February 26, 2016.

/s/ John T. Bryan
Printed Name: John T. Bryan

In the presence of:

/s/ Robert A. Fuhrer
Signature of Witness
Name of Witness: Robert A. Fuhrer
Address: 2121 Cooperative Way
Herndon, VA 20171
Occupation: Attorney

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS that the undersigned director of ARRIS International plc, a company organized under the laws of England and Wales (the "Corporation"), which is about to file an annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, on Form 10-K, hereby constitutes and appoints Robert Stanzione, Patrick Macken and David Potts and each of them his or her true and lawful attorney-in-fact and agent, with full power and all capacities, to sign the Corporation's Form 10-K and any and all amendments thereto, and any other documents in connection therewith, to be filed with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as she or he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or their substitutes may lawfully do or cause to be done by virtue hereof.

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IN WITNESS WHEREOF, this power of attorney has been executed as a deed by the undersigned and is intended to be and is hereby delivered on February 26, 2016.

/s/ James A. Chiddix
Printed Name: James A. Chiddix

In the presence of:

/s/ Patrick W. Macken
Signature of Witness
Name of Witness: Patrick W. Macken
Address: 3871 Lakefield Drive
Suwanee GA 30024
Occupation: Attorney

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS that the undersigned director of ARRIS International plc, a company organized under the laws of England and Wales (the "Corporation"), which is about to file an annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, on Form 10-K, hereby constitutes and appoints Robert Stanzione, Patrick Macken and David Potts and each of them his or her true and lawful attorney-in-fact and agent, with full power and all capacities, to sign the Corporation's Form 10-K and any and all amendments thereto, and any other documents in connection therewith, to be filed with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as she or he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or their substitutes may lawfully do or cause to be done by virtue hereof.

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IN WITNESS WHEREOF, this power of attorney has been executed as a deed by the undersigned and is intended to be and is hereby delivered on February 26, 2016.

/s/ Andrew T. Heller
Printed Name: Andrew T. Heller

In the presence of:

/s/ Patrick W. Macken
Signature of Witness
Name of Witness: Patrick W. Macken
Address: 3871 Lakefield Drive
Suwanee GA 30024
Occupation: Attorney

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS that the undersigned director of ARRIS International plc, a company organized under the laws of England and Wales (the “Corporation”), which is about to file an annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, on Form 10-K, hereby constitutes and appoints Robert Stanzione, Patrick Macken and David Potts and each of them his or her true and lawful attorney-in-fact and agent, with full power and all capacities, to sign the Corporation’s Form 10-K and any and all amendments thereto, and any other documents in connection therewith, to be filed with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as she or he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or their substitutes may lawfully do or cause to be done by virtue hereof.

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This power of attorney shall be governed by and construed in accordance with English law.

IN WITNESS WHEREOF, this power of attorney has been executed as a deed by the undersigned and is intended to be and is hereby delivered on February 26, 2016.

/s/ Jeong H. Kim
Printed Name: Jeong H. Kim

/s/ Patrick W. Macken
Signature of Witness
Name of Witness: Patrick W. Macken
Address: 3871 Lakefield Drive
Suwanee GA 30024
Occupation: Attorney

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS that the undersigned director of ARRIS International plc, a company organized under the laws of England and Wales (the "Corporation"), which is about to file an annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, on Form 10-K, hereby constitutes and appoints Robert Stanzione, Patrick Macken and David Potts and each of them his or her true and lawful attorney-in-fact and agent, with full power and all capacities, to sign the Corporation's Form 10-K and any and all amendments thereto, and any other documents in connection therewith, to be filed with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as she or he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or their substitutes may lawfully do or cause to be done by virtue hereof.

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This power of attorney shall be governed by and construed in accordance with English law.

IN WITNESS WHEREOF, this power of attorney has been executed as a deed by the undersigned and is intended to be and is hereby delivered on February 26, 2016.

/s/ Doreen A. Toben
Printed Name: Doreen A. Toben

/s/ Jenette Pena
Signature of Witness
Name of Witness: Jenette Pena
Address: 2 Park Avenue, RM 8R
New York, NY 10016
Occupation:

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS that the undersigned director of ARRIS International plc, a company organized under the laws of England and Wales (the “Corporation”), which is about to file an annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, on Form 10-K, hereby constitutes and appoints Robert Stanzione, Patrick Macken and David Potts and each of them his or her true and lawful attorney-in-fact and agent, with full power and all capacities, to sign the Corporation’s Form 10-K and any and all amendments thereto, and any other documents in connection therewith, to be filed with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as she or he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or their substitutes may lawfully do or cause to be done by virtue hereof.

This power of attorney shall be valid for a period of 90 days from the date specified below.

This power of attorney shall be governed by and construed in accordance with English law.

IN WITNESS WHEREOF, this power of attorney has been executed as a deed by the undersigned and is intended to be and is hereby delivered on February 26, 2016.

/s/ Debora J. Wilson
Printed Name: Debora J. Wilson

/s/ John P. Sanborn
Signature of Witness
Name of Witness: John P. Sanborn
Address: 3994 Ballynahown Circle
Fairfax, VA 22030
Occupation: Retired

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS that the undersigned director of ARRIS International plc, a company organized under the laws of England and Wales (the "Corporation"), which is about to file an annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, on Form 10-K, hereby constitutes and appoints Robert Stanzione, Patrick Macken and David Potts and each of them his or her true and lawful attorney-in-fact and agent, with full power and all capacities, to sign the Corporation's Form 10-K and any and all amendments thereto, and any other documents in connection therewith, to be filed with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as she or he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or their substitutes may lawfully do or cause to be done by virtue hereof.

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This power of attorney shall be governed by and construed in accordance with English law.

IN WITNESS WHEREOF, this power of attorney has been executed as a deed by the undersigned and is intended to be and is hereby delivered on February 26, 2016.

/s/ David A. Woodle
Printed Name: David A. Woodle

In the presence of:

/s/ Hollie B Woodle
Signature of Witness
Name of Witness: Hollie B. Woodle
Address: 429 Brandy Wine Drive
State College PA 16801
Occupation:

Exhibit 31.1

Certification Pursuant to § 302 of the Sarbanes-Oxley Act of 2002

I, Robert J. Stanzione, certify that:

1. I have reviewed this annual report on Form 10-K of ARRIS International plc;

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(s) 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 internal 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 fiscal 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(s) 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 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: February 29, 2016

/S/ R J STANZIONE
Robert J. Stanzione
Chief Executive Officer, Chairman

Exhibit 31.2

Certification Pursuant to § 302 of the Sarbanes-Oxley Act of 2002

I, David B. Potts, certify that:

1. I have reviewed this annual report on Form 10-K of ARRIS International plc;
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(s) 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 internal 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 fiscal 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(s) 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 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: February 29, 2016

/s/ DAVID B. POTTS

David B. Potts
Executive Vice President,
Chief Financial Officer and
Chief Accounting Officer

Exhibit 32.1

Certification Pursuant to § 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. § 1350)

The undersigned, as the chief executive officer of ARRIS International plc, certifies that to the best of his knowledge the Annual Report on Form 10-K for the period ended December 31, 2015, which accompanies this certification, fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 and the information contained in the annual report fairly presents, in all material respects, the financial condition and results of operations of ARRIS International plc at the dates and for the periods indicated. The foregoing certification is made pursuant to § 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. § 1350) and shall not be relied upon for any other purpose.

Dated this 29th day of February, 2016.

/s/ R J STANZIONE
Robert J. Stanzione
Chief Executive Officer, Chairman

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act, has been provided to ARRIS International plc, and will be retained by ARRIS International plc, and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

Certification Pursuant to § 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. § 1350)

The undersigned, as the chief financial officer of ARRIS International plc, certifies that to the best of his knowledge the Annual Report on Form 10-K for the period ended December 31, 2015, which accompanies this certification, fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 and the information contained in the annual report fairly presents, in all material respects, the financial condition and results of operations of ARRIS International plc at the dates and for the periods indicated. The foregoing certification is made pursuant to § 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. § 1350) and shall not be relied upon for any other purpose.

Dated this 29th day of February, 2016.

/s/ DAVID B. POTTS
David B. Potts
Executive Vice President,
Chief Financial Officer, and
Chief Accounting Officer

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act, has been provided to ARRIS International plc, and will be retained by ARRIS International plc, and furnished to the Securities and Exchange Commission or its staff upon request.