CONNECTING A SMARTER FUTURE

Spirent Communications plc
ANNUAL REPORT 2016

We provide innovative products and services to help the world communicate and collaborate faster, better and securely.

We help our customers develop new devices, network equipment and applications with emerging communication technologies and assure their network performance and customer experience.

Our customers transform their networks and businesses and outperform their customers' expectations and competition.

Contents

Cautionary statement regarding forward-looking statements

This Annual Report may contain forward-looking statements which are made in good faith and are based on current expectations or beliefs, as well as assumptions about future events. You can sometimes, but not always, identify these statements by the use of a date in the future or such words as "will", "anticipate", "estimate", "expect", "project", "intend", "plan", "should", "may", "assume" and other similar words. By their nature, forward-looking statements are inherently predictive and speculative and involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future. You should not place undue reliance on these forward-looking statements, which are not a guarantee of future performance and are subject to factors that could cause our actual results to differ materially from those expressed or implied by these statements. The Company undertakes no obligation to update any forward-looking statements contained in this Annual Report, whether as a result of new information, future events or otherwise.

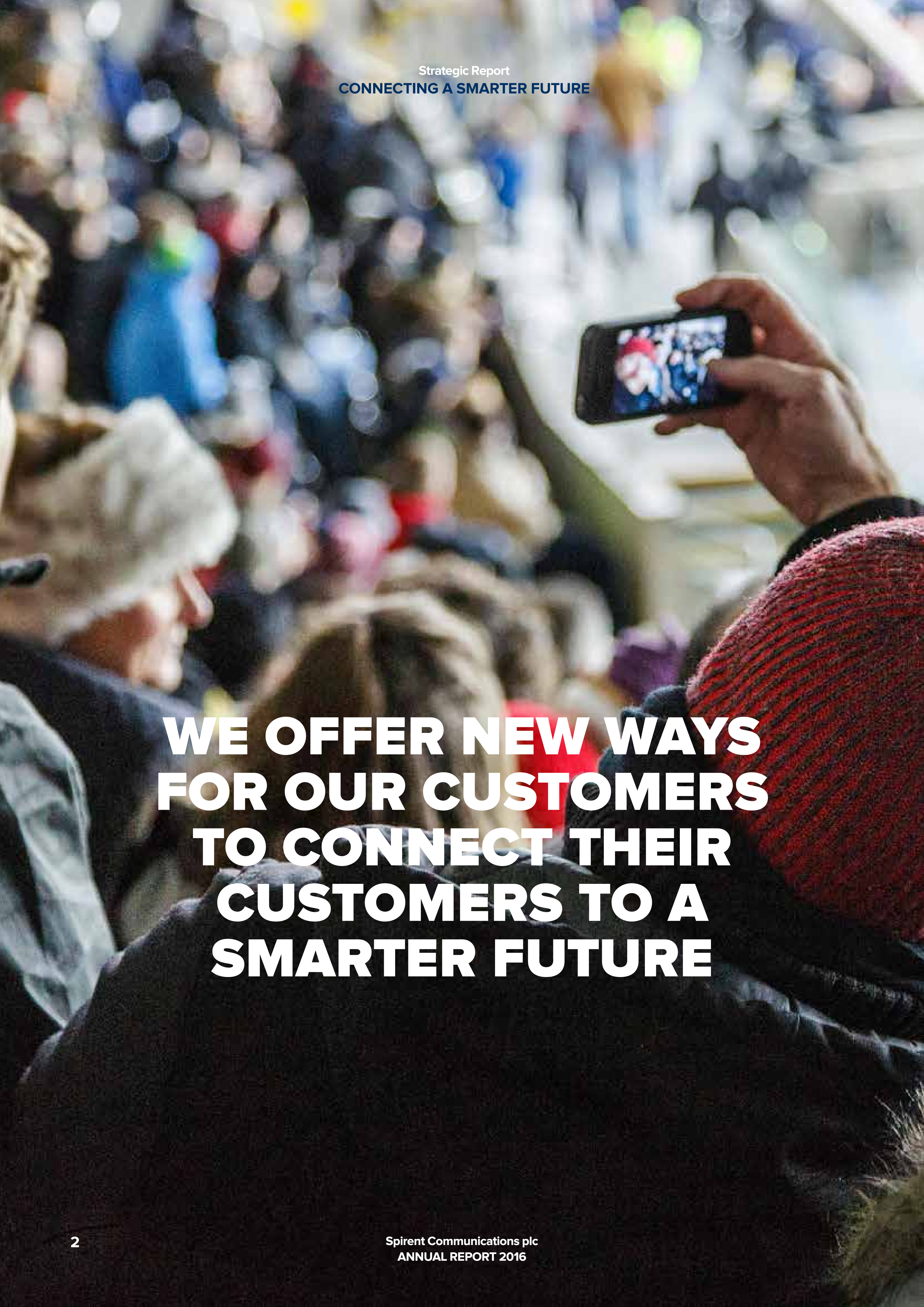
Revenue		Adjusted operating profit[1]		Adjusted basic earnings per share[2]	
$457.9m 2016	$477.1m 2015	$46.5m 2016	$42.1m 2015	5.29c 2016	5.00c 2015

Dividend per share		Free cash flow[3]		Basic (loss)/earnings per share	
3.89c 2016	3.89c 2015	$25.9m 2016	$35.3m 2015	(6.93)c 2016	2.18c 2015

Performance highlights

- Strong growth in largest business, Networks & Applications, revenue increased 6 per cent driven by strong demand for high-speed Ethernet and test automation, operating profit before exceptional items up 33 per cent.
- Positioning delivered strong growth, although revenue in Wireless & Positioning reduced 14 per cent due to the contraction in the device test market. Operating profit before exceptional items increased 15 per cent and operating margin before exceptional items rose to 14.4 per cent due to strong performance in Positioning and operating expense management.
- Service Assurance revenue decreased by 17 per cent as expected, reflecting part of the non-repeating contract for hand-held test tools delivered in 2015, while maintaining operating margin before exceptional items at 14.6 per cent.
- 18 new products were launched including the industry's first Quint-speed high-speed Ethernet product covering 100G, 50G, 40G, 25G and 10G, the industry's first 2.5G and 5G BASE-T Ethernet test solution, software-as-a-service solution for network and cloud testing, next-generation channel emulator, an innovative security test product and a mid-range global navigation satellite system simulator.
- Major contract won with Tier-1 service provider for active testing in the network.
- Completed our security test product (CyberFlood) and launched our security consulting practice (SecurityLabs). Closed deals with a large global telecoms company, a leading security products vendor and a global financial institution.
- Received Duke of Edinburgh's Navigation Award for Technical Achievement.

Notes
1 Before charging exceptional items, acquisition related costs, acquired intangible asset amortisation and impairment, goodwill impairment and share-based payment.
2 Adjusted basic earnings per share is based on adjusted earnings as set out in note 12 of Notes to the full year consolidated financial statements.
3 Operating cash flow after tax, net interest and net capital expenditure.



WE OFFER NEW WAYS FOR OUR CUSTOMERS TO CONNECT THEIR CUSTOMERS TO A SMARTER FUTURE

1.6bn
social network users worldwide[1]

59%
of employees steal proprietary corporate data[1]

22%
traffic growth[2] (CAGR 2015-2020)

99%
of computers are vulnerable to cyber-attacks[1]

+176%
increase in the number of cyber-attacks to US organisations in 2016[1]

1.7bn
LTE mobile subscribers (Q3 2016)[3]

$100bn
the estimated annual cost for cyber-crime committed globally[1]

+169m
personal records are exposed each year[4]

27bn
connected things (2025)[5]

Sources
1 https://heimdalsecurity.com/blog/10-surprising-cyber-security-facts-that-may-affect-your-online-safety/.
2 IHS Market Insight "Research Note Telecom Capex Languishes in Flatland" (November 21, 2016).
3 GSA Mobile Fast Facts (January 31, 2017).
4 http://socialnomics.net/2016/08/17/6-cyber-security-statistics-you-should-know-for-2016/
5 Machina Research. "IoT Global Forecast and Analysis 2015-2025" (August, 2016).

Spirent is a global business serving customers around the world. We have development centres with teams of experts and highly specialised sales teams in every region.

Revenue

- Networks & Applications 57%
- Wireless & Positioning 26%
- Service Assurance 17%

Adjusted operating profit[1, 2]

- Networks & Applications 47%
- Wireless & Positioning 31%
- Service Assurance 22%

Number of employees

- Networks & Applications 64%
- Wireless & Positioning 20%
- Service Assurance 16%

Notes
1 Adjusted operating profit is before charging exceptional items, acquisition related costs, acquired intangible asset amortisation and impairment, goodwill impairment and share-based payment.
2 Percentages calculated by reference to adjusted operating profit before corporate costs.

Networks & Applications

The Networks & Applications business develops performance and security test systems for next-generation networks and applications, simulating real-world high-capacity conditions in the lab and in the network, and also provides test automation, orchestration and management systems.

Focus
- High-speed Ethernet and IP performance testing for data centers and networks
- Cloud and network virtualisation performance testing
- Applications performance testing
- Security testing
- Mobile infrastructure emulation and performance testing
- Test automation, orchestration and management

Customer use
- Develop and test the performance and security of new devices, network equipment and applications

Customer value
- Ensure product quality and performance
- Accelerate the time to deliver their products to market
- Reduce development and test costs

Read more on pages 26 to 29

Wireless & Positioning

The Wireless & Positioning business develops functional and performance test systems for 4G LTE and 3G mobile devices and services and for satellite positioning devices and systems, and products and services for assessing the service quality on real networks and for detecting interference in global navigation satellite systems.

Focus
- Wireless devices (such as smartphones, tablets and Internet of Things)
- Wireless services, including voice over LTE and video
- Satellite navigation and global positioning simulation and vulnerability detection and assessment

Customer use
- Develop and test new wireless connected devices (smartphones, Internet of Things)
- Measure service experience of new services over different real networks
- Develop and test the robustness of global navigation satellite systems

Customer value
- Ensure product quality and performance
- Accelerate the time to deliver their products to market
- Reduce development and test costs

Read more on pages 30 to 33

Service Assurance

The Service Assurance business develops distributed systems for service assurance and analytics for network operators to turn-up new services, understand network performance and customer experience, and diagnose and troubleshoot network and customer problems. The business also provides portable test tools for field service organisations.

Focus
- Service assurance system for Ethernet business services
- Network and customer experience management analytics
- Field service test tools

Customer use
- Measure and improve network performance and customer experience
- Turn-up new subscribers and services

Customer value
- Reduce time and costs to turn-up new services and subscribers and to troubleshoot problems
- Reduce customer churn and improve customer experience

Read more on pages 34 to 37

Spirent is an expert in understanding customers' complex technical requirements and business imperatives and developing innovative products and services to meet their challenges and expectations.

1

The markets we target
We target large, fast-growing, complex markets, driven by a major disruption or challenge.

We serve customers who develop products and services and who operate and manage networks.

2

Continuing demand for our products and solutions
We operate in a fast-moving, technologically demanding environment in which everyone and everything is connected. Faster data speeds, complexity, security and the innovation of our customers and their customers' drives the demand for our products and solutions.

2 3

Competitive advantage
We aim to be first to market and to register intellectual property to create high barriers to entry for competition and maintain our high margin and high value position in the market.

Our competitive differentiation comes from the test methodologies we develop and our active test, automation and analytics expertise and technologies.

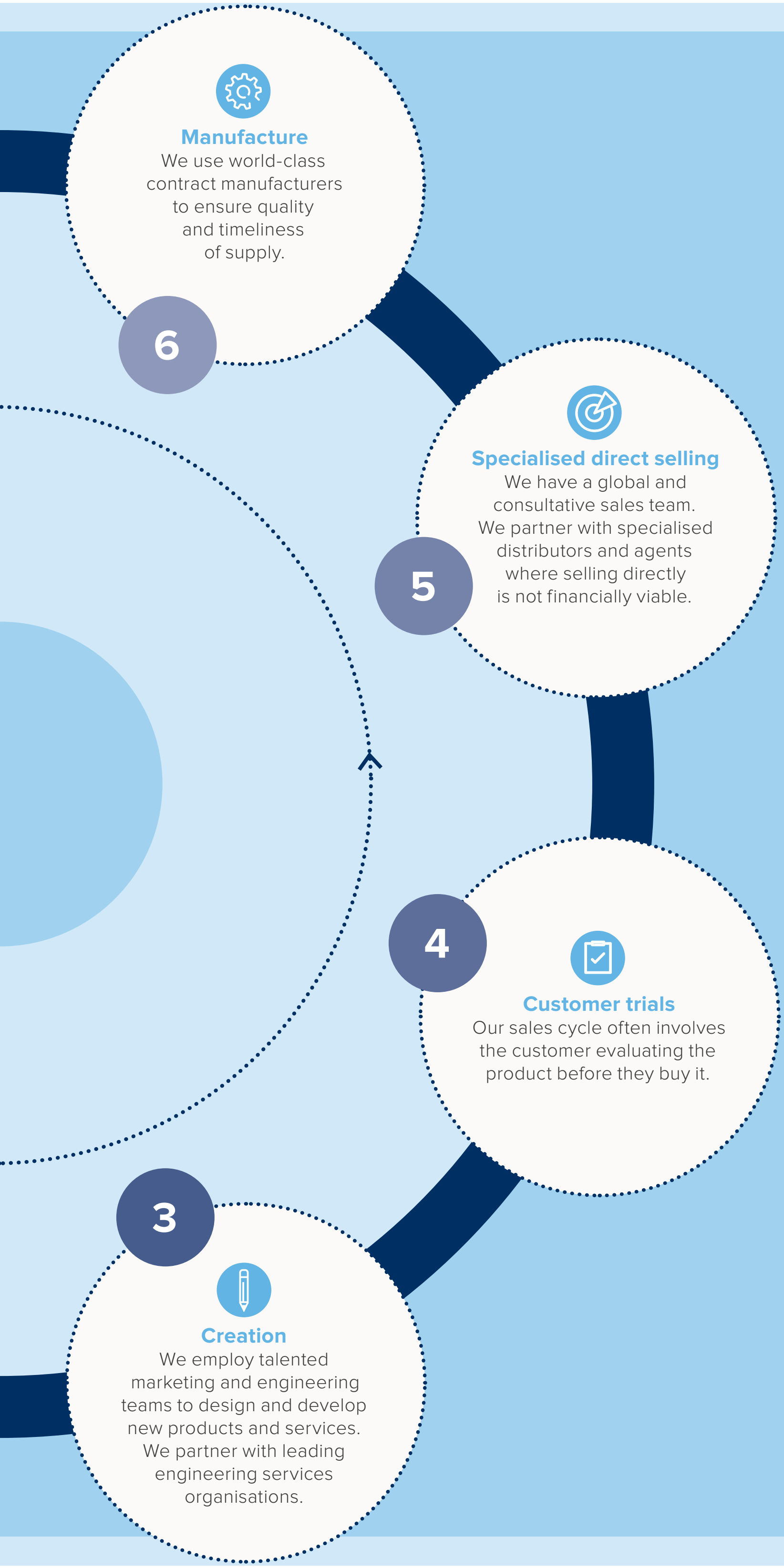
Our strategy

Work closely with customers to understand their emerging plans and challenges, and develop first to market products and services to fulfill their requirements and exceed their expectations.

How our strategy and business model work together

Our business model embodies our critical success factors of working closely with customers and designing innovative first to market products and services.

Read more on pages 18 and 19



4

Customers selling proposition

Our products and services:

- reduce the time to get products and systems to market;
- ensure the quality of customers' products, systems and services;
- protect customers' brand reputation; and
- increase the efficiency of their operations through automation and analytics to optimise their activities and investments.

5 6 7 8

Value-creation culture for our stakeholders and shareholders

We have a culture that focuses on creating value for our stakeholders and shareholders. We encourage rational risk taking. We attract and retain talented people and offer career development. We have a non-discriminatory workplace and fair and competitive remuneration.

Our dividend policy is to maintain a sustainable dividend for shareholders as we consider the dividend to be a core component of shareholder return and one on which they can depend.

> Focus on winning investments.

Alex Walker
Chairman

During recent years, there have been many changes within the markets we serve. However, change brings real opportunities for Spirent to deploy its skills to benefit from the great challenges of rapid technology developments.

For the last three years we have increased investment in product development and sales and marketing. These investments, in the Ethernet testing market in particular, have seen parts of the business return to significant growth where Spirent has taken market share from key competitors. In other areas, such as cyber security, investment is beginning to bear fruit with important contract wins as proof points. In addition, the scale of opportunity for Spirent's active test solutions in live network deployments gives major cause for excitement in 2017 and beyond.

The quality of Spirent's business is improving and declining areas are expected to stabilise. This was reflected in 2016 by a 10 per cent increase in adjusted operating profit to $46.5 million. The order book rose $13.8 million over the prior year despite a modest fall in revenue. Adjusted operating margin improved to 10.2 per cent from 8.8 per cent in the prior year.

Focus on winning investments

As a Board we are acutely aware of our responsibilities to deliver long-term profitable growth across the Group. We have made significant progress in winning back market share and growing a substantial proportion of our businesses in 2016.

A great deal of the Board's work in 2016 was directed towards assessing the most promising growth areas for the Group which will optimise investment returns for our shareholders. Accordingly, we are focusing on the following key growth areas, High-speed Ethernet, Security, Virtualised Networks and Active Test in the Live Network. Eric Hutchinson, our Chief Executive Officer, expands on this in his review of the year on pages 14 to 17 of this Annual Report. The focus on these key growth areas has led to our reorganising our business into new segments in 2017 which has led to a significant portion of the impairment charge we are taking in 2016. We expect the investment of the last three years in these areas to continue to drive the performance of the Group in the near and medium term.

Depite the market challenges in our Wireless business, we continue to see opportunities in the medium and longer term as 5G is rolled out and Internet of Things connected devices need testing prior to deployment.

Employees

I again take this opportunity to recognise how critical the contribution of our employees is to the success of Spirent. Throughout my tenure as Chairman I have visited Spirent offices across the globe and am always struck by the drive and commitment our employees demonstrate to bringing success to the Group. As a business we are focused on solving difficult technical issues through delivering complex products, solutions and service to our customers. The fact that we have taken market share in a number of our businesses and achieved success with contracts supporting the latest technical advances, demonstrates the breadth of engineering and sales talent across the Group. They continue to innovate to provide exciting new answers to our customers' thorniest issues.

Dividend

The Board is recommending a final dividend of 2.21 cents, resulting in a total dividend in 2016 of 3.89 cents, unchanged from 2015.

Board changes

There have been a number of changes to the composition of the Board in 2016.

Duncan Lewis sadly passed away in March 2016. Duncan had been a much valued Board member for nine years and his knowledge of the technology sector and the likely direction of change is greatly missed by me and my fellow Board members.

Our Chief Financial Officer, Rachel Whiting, stepped down from the Board in May 2016 and retired in September 2016 after almost thirty years' service. Paula Bell joined the Group in September 2016 as the new Chief Financial Officer. Paula is an experienced group finance director having previously worked in that role at both John Menzies plc and Ricardo plc. During her career she has also held senior finance and leadership roles at BAA plc, AWG plc and Rolls-Royce plc. Her experience in engineering-led businesses such as ours is particularly valuable to the Group.

Tom Maxwell steps down as Chairman of our Remuneration Committee at the conclusion of our AGM after almost ten years on the Board. We thank Tom for his contribution to the work of the Board and particularly for his stewardship over remuneration matters, an area in which investor sentiment has changed so much in recent years. Many of the Group's employees are based in the United States and matching the expectations of employees and executives regarding compensation and benefits with the expectations of UK institutional investors remains a major challenge for the Company.

We welcomed two new non-executives to the Board in December 2016, Gary Bullard and Bill Thomas. Gary has had a long and successful career in senior international executive roles in companies such as IBM, BT and Logica, bringing a strong skillset to a technology business such as ours. He also has significant remuneration experience from his time as chairman of the remuneration committee at Rotork plc and will take over the chairmanship of the Remuneration Committee from Tom Maxwell after this year's AGM. Bill has extensive experience of leading large highly complex services businesses and technology-led organisations including HP Enterprise Services and EDS EMEA. He also has current experience at UK plc Board level and as an adviser on cyber security.

Tom Lantzsch has announced his intention to step down from the Board, effective 3 March 2017, in order to focus on his new role at Intel Corporation. Tom joined the Board in May 2015 and his insights have been of great value. We wish him well.

After seven years as Chairman, I shall retire from the Board after this year's AGM. It has been a privilege to act as your Chairman and I believe I leave the Group well-positioned for the future.

Outlook

Strategic contract wins in our core business in 2016 for High-Speed Ethernet test systems, Virtualisation, Cloud, and Active Test in live networks for major service providers, combined with competitive wins with new security test solutions, give the Board confidence to expect growth in 2017.

Alex Walker
Chairman
2 March 2017

Understanding our market and global trends.

Our target markets in the communication industry are large, growing and vibrant. We are positioned to capitalise on the development and operation of high-speed Ethernet/IP core, metro and access networks and data centers, the transition to virtualised networks, mobile broadband networks and services and the evolution of global navigation satellite systems (GNSS).

The industry is widely-impacted by two dominant market trends: the unrelenting traffic growth and the business imperative to reduce operating costs and capital expenditures.

There are several market disruptions on which we believe we can capitalise. They are: virtualisation, Internet of Things (IoT), 5G and security. We are investing and working to provide products and services that keep pace with the technical and operational challenges these disruptions bring.

IHS estimates network operators invested $45.3 billion in wireline network equipment and software (annual growth 4.2 per cent) and $83.6 billion in wireless network equipment and software (annual growth 1.1 per cent) in 2016[1].

Spirent sells products and services to the companies that develop these products to accelerate their time to market and to ensure their security and performance. Spirent also sells products and services to the network operators that deploy, operate and manage networks and services.

Manage unrelenting traffic growth

Unrelenting traffic growth from video traffic, data centers and IoT are driving operators to make architectural and operational changes. Video traffic drives significant changes in both fixed and mobile networks. Service providers are reducing video traffic via caching/content delivery networks, improved encoding technologies and adaptive streaming techniques to provide the optimal video experience for viewers using TVs, PCs, laptops, tablets or phones, while minimising the use of network resources and bandwidth.

Market Disruption

Market disruption	Why customers invest	Market health indicator
Virtualisation	Moving from hardware to software Deliver exponentially more data cost effectively Adapt rapidly to changing network conditions	**Virtualisation Spending** 2015: $3bn 2020: $16bn CAGR+ 42%
IoT	IoT connections (2015): Connected Business 29% Connected Home 26% Consumer Electronics 21% Cellular IoT connections: 334 million in 2015 to 2.2 billion in 2025; Connected cars will be 45% IoT Application Revenue (2025): $1.3 Trillion	**Number of Connected Devices** 2015: 6bn 2025: 27bn CAGR+ 16%
5G	Enable new applications requiring ultra-low latency or extreme bandwidth: virtual reality and augmented reality Early adoption: Korean Olympics (2018) Standards: 2018-2020	**5G Equipment Revenue** 2015 : $2bn 2020: $10bn CAGR+ 32%
Cyber Security	Computers vulnerable to attack: 99% Cost of cyber-crime (global): $100 billion per year Increase in number of cyber-attacks to organisations (USA): +176%	**Security Test Revenue** 2015: $3bn 2022: $10bn CAGR+ 20%

Adding to the demand for mobile and fixed broadband services, IoT drives the demand for network connections, whether for devices with connectivity modules embedded in them or devices using personal area network solutions (eg. Wi-Fi, ZigBee, Bluetooth) that need backhauling to the network. IoT brings traffic patterns that are highly varied from one use case to another; for example, from low latency, infrequent sensing, non-critical reliability of agriculture applications to highly reliable, low latency, safety-of-life applications, like autonomous cars.

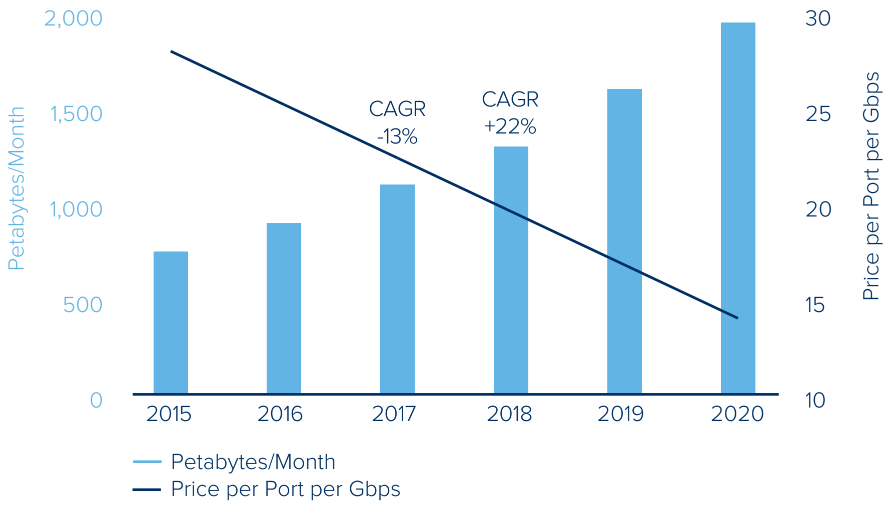
Among the various technologies serving IoT, cellular technologies are the largest growth engine for operator revenue. With 228 million IoT connections at the end of 2015, IHS projects the number of connections will almost triple to 658 million in 2020, generating connection revenue of $20 billion[2]. Consequently, leading global service providers are pursuing IoT opportunities aggressively. China Mobile already has more than 50 million IoT connections, and AT&T reported more than 28 million connected devices installed in June 2016[3]. Other leaders in IoT connections include Vodafone, Deutsche Telekom, Telefónica, and Verizon.

Drive reduction of operating expenses and capital expenditures

Operators cannot afford to match the traffic growth, driven largely by IP video, with spending on new transport equipment. The cost of telecom equipment is dropping 13 per cent a year, and traffic is climbing at a CAGR 2015-2020 of 22 per cent[4].

Operators are challenged to reduce operating expenses and to adopt new architectural and operational changes. These challenges drive the operators towards DevOps methodologies.

Telecom Equipment price decline



Expand mobile broadband service

Mobile broadband is the leading market driver in the communications industry. Mobile communications have become a way of life, even in emerging markets, and have emerged as important enablers for the emerging digital services opportunity that spans industry sectors. The number of mobile broadband subscribers passed fixed broadband subscribers in 2011, and the gap continues to grow. IHS estimates there will be 7.5 billion mobile subscribers by 2020, of which 3.3 billion (45 per cent of the total) will be 4G/LTE, whereas fixed broadband will remain under 1 billion[2].

There are around 657 mobile operators in the world; all of them have 3G networks, and some have several networks. 100 per cent of the world's W-CDMA operators have upgraded their network to HSPA or 3.5G. All mobile operators are currently investing in LTE; the GSA reports that 494 LTE networks have commercially launched in 162 countries[5]. The mobile infrastructure market is now shifting from hardware to software, led by LTE-Advanced upgrades; 127 operators have commercially launched LTE-Advanced networks and an additional 175 LTE operators are investing in LTE-Advanced deployments, studies or trials. 5,104 LTE user devices have been announced. There are 1.1 billion LTE subscriptions globally (Q4 2015). We expect robust spending to expand and operate these mobile networks, to troubleshoot network problems and to manage the customer experience.

Secure devices, networks and applications

High profile security incidents continue to make headlines across industry segments. With incidences of hacked banks, data breaches, and enterprises ransomware attacks, the overall prevalence and sophistication of cyber-crime is on the rise. According to a recent report from the UK National Crime Agency, cyber-enabled fraud (36 per cent) together with computer misuse (17 per cent) surpassed all other crime as a proportion of total UK crime in 2015[6]. The US government is planning to spend 35 per cent more on IT security efforts in 2017[7]. We expect overall spending on cyber security testing to increase based on the need to better detect and protect against these threats and our target market will grow at double digit levels driven by increased enterprise security spending.

Sources

1. IHS "Mobile and Telecom Network Equipment and Software Market Forecast 2016" (July 12, 2016).
2. IHS Technology "Telecom Trends and Drivers Biannual Market Report: Regional, H2 2016" (June 30, 2016).
3. READWRITE http://readwrite.com/2016/06/02/new-att-foundry-pl2/.
4. IHS. Market Insight "RESEARCH NOTE Telecom Capex Languishes in 'Flatland'" (November 21, 2016).
5. Global Mobile Suppliers Association (GSA) Report (April 8, 2016).
6. http://www.nationalcrimeagency.gov.uk/publications/709-cyber-crime-assessment-2016/file.
7. http://www.nextgov.com/cybersecurity/2016/02/obamas-2017-budget-boosts-cybersecurity-spending-35-percent-adds-federal-ciso/125789/.

Focus on business opportunities created by market trends and disruptions.

Spirent develops innovative products and offers services for **developers**, who design and produce chipsets, modules, connected devices, network equipment and applications, and for **operators**, who turn-up new networks, services and subscribers, manage and optimise their networks and services, and understand and improve their customers' experience.

We accelerate the transition from the developers' lab to the operators' network. We emulate real-world conditions in the lab and test new devices, network equipment and applications in the operating network.

	Developers	Operators and Enterprises
Target customers	Developers of chipsets, modules, connected devices, network equipment and applications	Network operators and enterprise network managers
Primary function	To test the functionality, performance and security of their new products before commercialisation	To understand, optimise and troubleshoot network performance and customer experience and to assess security vulnerabilities
Value proposition	To accelerate time to market and reduce development and testing costs for new products	To reduce time and cost to understand, diagnose and fix network performance and customer experience problems
Technological breadth	• Ethernet/IP, cloud and virtualisation performance • Layer 4-7 application and security performance • Wireless devices: smartphones, tablets and other connected devices, such as Internet of Things (IoT) • Mobile Network Infrastructure • Global Navigation Satellite Systems (GNSS) • Automotive/Connected Car	For mobile and fixed networks: • service experience assessment over variety of networks • service assurance for turn-up, performance measurement and troubleshooting • network performance and customer experience analytics • active mobile network performance measurements • systems and services to measure user experience with voice, video and data services and battery life over various networks and under different conditions For positioning, navigation and timing: • simulators for military and commercial applications • interference detection systems
Geographic coverage	Our products and services are sold globally We have specialised, consultative regional sales organisations	
Core competencies for sustained value creation and competitive differentiation	Our expertise and technologies for: • test methodology development • active performance testing – capability to generate complex, high-capacity traffic • test automation, orchestration and management systems in the lab and in the network • customer and network analytics	

Networks & Applications

Scope

We develop performance and security test systems for next-generation networks and applications, simulating real-world, high-capacity conditions in the lab and in the network; our portfolio covers high-speed Ethernet/IP for data centers and networks, cloud, virtualisation, applications, security, and mobile networks.

We provide test automation, orchestration and management systems.

Business opportunity

- Ethernet/IP speeds across applications: 2.5G, 5G, 10G, 25G, 50G, 200G and 400G.
- Network virtualisation.
- Mobile network operators investing in services – 4G LTE, voice over LTE (VoLTE), video over LTE.
- Cyber security vulnerability assessment.
- IoT devices, applications and networks.
- Automotive Ethernet, Connected Car, Autonomous Vehicles, Assisted Driving.

Business strategy

- Lead in data center and wide area network high-speed Ethernet and IP performance test.
- Invest in software-as-a-service for software-defined network (SDN) and network functions virtualisation (NFV) test methodologies.
- Expand our security test offerings with new security test tools and our consulting services.
- Extend the capabilities for mobile infrastructure testing in the labs.
- Meet emerging requirements for active tests in the operational network.
- Expand the footprint of our test automation, orchestration and management systems.

Read more on pages 26 to 29

Wireless & Positioning

Scope

We develop test systems and offer services to accelerate the time to develop and launch smartphones, connected devices for the Internet of Things and wireless communication systems and services, such as VoLTE and video.

We develop positioning, navigation and timing simulators and interference detection systems for military and commercial segments.

Business opportunity

Wireless Device Test business:

- Carrier acceptance.
- Channel emulation.
- Location-based services.
- 4G LTE services.
- Internet of Things (IoT).
- 5G.

Positioning, Navigation & Timing business:

- Commercial application segments.
- Systems and services for detecting and assessing vulnerabilities.
- Products and services for network timing and autonomous vehicles (like drones and cars).

Business strategy

- Develop products and services that accelerate the time to market and reduce the costs to develop and launch new devices and services for wireless devices and applications, with a focus on connected devices for the IoT and 5G.
- Build products and offer services to measure user experience of new services.
- Expand into selected commercial market segments and develop new products and services for detecting and testing for vulnerabilities in positioning, navigation and timing applications.

Read more on pages 30 to 33

Service Assurance

Scope

We develop distributed systems for service assurance and analytics for network operators to turn-up new services, understand network performance and customer experience, and diagnose and troubleshoot network and customer problems.

We develop systems and offer services to measure user experience of services, such as voice, video and data, and battery life on various networks and under different conditions.

We also provide portable test tools for field service organisations.

Business opportunity

- Active service assurance, analytics and test orchestration.
- Ethernet/IP business services.
- Mobile networks and services (3G, 4G, 5G).
- Internet of Things.
- Network virtualisation.
- Service Experience systems and services: voice, video and data services and battery life.
- Portable test tools for field service organisations in network operators.

Business strategy

- Enhance our new active service assurance product for Ethernet business service and mobile network turn-up, active testing and troubleshooting.
- Expand the footprint of our analytics system in our current installed base and in new service providers.
- Develop new active service assurance solutions for mobile network operators, leveraging our mobile test tools and our analytics expertise and technology.
- Expand our expertise and system capability to measure service quality and customer experience for services, like voice, video and data, and battery life over various networks and under different conditions.
- Enhance our hand-held test tools for emerging requirements for in-home applications and automating workflow routines.

Read more on pages 34 to 37

> **"The emphasis for 2017 and beyond is to focus our business priorities on the large, sustainable growth vectors that we have laid the foundations for in the past three years."**

Eric Hutchinson
Chief Executive Officer

2016 highlights

- Spirent's Ethernet/IP test business had an outstanding year with double digit growth. Spirent delivered 400G Ethernet test solutions, and launched the industry's first Quint-speed Ethernet test product for 10G through to 100G and the first 2.5G and 5G BASE-T Ethernet test solution.
- Spirent took a leading position in the emerging virtual and cloud test market, launching Spirent Temeva, a software-as-a-service (SaaS) solution for network and cloud testing, initially offering web-based applications covering network traffic testing, network functions virtualisation (NFV) infrastructure benchmarking, cloud performance and capacity planning.
- Spirent remains the market leader in positioning, navigation and timing test solutions. The business grew again this year and launched three new products. There was, and continues to be, robust demand for our global navigation satellite system (GNSS) simulation solutions to test the resilience of positioning and timing systems against vulnerabilities.
- Spirent made significant advances in security testing, launching a new product, CyberFlood, the world's highest performing application layer test solution, and started an ethical hacking service with SecurityLabs. Landmark deals were booked with network operators, security product vendors and enterprises that give us confidence for our future prospects in the security test business.
- Spirent expanded the wireless test portfolio, introducing the industry's most compact and powerful enhanced packet core and IMS network emulation for evaluating the next-generation of mobile services in our Elevate product, also launching, Vertex, the industry's first modular RF Channel Emulator, targeted at mobile device and infrastructure ecosystems. Important deals were won at chipset vendors and carriers for video and audio quality testing. Spirent delivered first-to-market solutions for the industry's new enhanced voice services (EVS) high-definition audio codec. Additionally, we won a key deal at a large US carrier to significantly reduce the testing time and cost for Internet of Things (IoT) device testing.
- Spirent has a strong solutions portfolio for network operations, leveraging our active test, analytics and automation capabilities:
  - Lumos was launched, an active service assurance system for automating workflows in hybrid networks. The system was instrumental in achieving a 10x improvement in small cell site turn-up at a large US carrier.
  - A large order was booked for 100G probes for Ethernet production networks at a Tier-1 carrier.
  - The deployment of the customer and network analytics system, InTouch CNA, at a major operator in Latin America was completed.
  - Enhancements to the Mobility Infrastructure test product, Landslide, combined with data analytics capability, resulted in contract wins with two Tier-1 service providers for active testing in wireless base stations, backhaul and infrastructure. Additionally, Nokia and Spirent demonstrated the largest public mobile core test.

2016 revenue performance

The Group improved adjusted operating profit performance despite some predicted headwinds. Group revenue decreased by 4 per cent on 2015 to $457.9 million with growth at Networks & Applications of 6 per cent more than offset by declines at Wireless & Positioning and Service Assurance of 14 per cent and 17 per cent, respectively. The decrease in Wireless revenue was due to the previously flagged contraction of the wireless device test market. This line of business has experienced significant decline from 2014 to 2016 due to the reduced spending in 4G R&D programmes and smartphone certification efforts by our customers. Over the next few years, we expect spending to increase in 5G R&D programmes and IoT network certification progress. The decrease in Service Assurance revenue, also previously flagged, was due to the final phase of a non-repeating contract for hand-held test tools for $16.0 million delivered in 2015.

Focus on the key growth opportunities

The overriding themes in the test and measurement industry set out in last year's report remain in place: the move from lab-based testing to deployment in the network, the implementation of virtualisation of the network, the shift in emphasis in wireless to connected devices with maturing of the smartphones ecosystem and customer consolidation. Exponential growth in data, amidst ever heightened cyber security threats will set the agenda for the next decade. Spirent is adapting to the changes and is aligned with the new opportunities that have been created. The emphasis for 2017 and beyond is to focus our business priorities on the large, sustainable growth vectors that we have laid the foundations for in the past three years.

Strategy

Our purpose is to serve the test, measurement, validation and assurance needs of our customers to deliver high quality, high reliability and highly scalable networks, equipment, devices and services. Spirent has a wide customer base across telecom service providers, network equipment manufacturers, wireless and positioning device manufacturers and local networks in enterprise and government.

The key strategic objective is to ensure our leadership in Ethernet and IP test solutions, virtualisation of network functions, service assurance of cloud services and mobile networks and in cyber security test.

These areas are where the industry is investing for the future development of digital communications and interoperability. Working in this environment, Spirent helps to improve the quality of products and services by detecting and diagnosing performance problems. The commercial benefit to clients is to accelerate the time to market to avoid costly recalls that can negatively impact brand reputation. In the network, Spirent improves network operating performance and customer experience, reducing churn and enabling the launch of new services with increased confidence in a timely, defect-free manner.

The growth drivers for the industry are: the virtualisation of network functions, as this is the only way to deliver the exponential growth in data services in an economic fashion; cyber security, critical to protecting privacy, avoiding costly losses and protecting reputation; and 5G, enabling the connection of a myriad of devices forming the IoT and offering imaginative new applications. Spirent's products and investments are aligned to capitalise on the business opportunities these disruptive technologies create.

Spirent's expertise in test methodologies, active test systems, analytics and automation, is recognised across the industry. The development of a portfolio of differentiated products, technologies, and insights has immense value to Spirent's customers. This is the result of decades of experience and key relationships with a blue-chip customer base.

Focus

During 2016 our senior team undertook a fundamental review of the lines of business to rank the areas where the best likelihood of long-term success with optimal earnings growth potential lie. This process allowed Spirent to assess whether its existing structure was still fit for purpose in light of evolving market dynamics and our desire to use our varied and complementary expertise to gain maximum benefit from the business drivers first laid out at the time of the 2015 full year results, namely:

- High-Speed Ethernet
- Cloud and Virtualisation
- Mobility Infrastructure
- Cyber Security
- Big Data Analytics
- New Growth Opportunities – Automotive and IoT

The following diagram shows Spirent's business segments in 2016 and 2017 and the lines of business that constitute them.

2016

Networks & Applications
Cloud/IP, Application Security, Mobile Infrastructure, Automation

Wireless & Positioning
Wireless, Developer Tools, Positioning

Service Assurance
Service Assurance, Service Experience, Customer Experience Management, Device Intelligence

$ million	2016	2015[1]
Revenue		
Networks & Applications	**259.4**	244.0
Wireless & Positioning	**118.5**	137.2
Service Assurance	**80.0**	95.9
	457.9	477.1
Adjusted operating profit[2]		
Networks & Applications	**25.2**	18.9
Wireless & Positioning	**17.1**	14.9
Service Assurance	**11.7**	14.1
Corporate	**(7.5)**	(5.8)
	46.5	42.1

2017

Networks & Security
Cloud/IP, Application Security, Positioning

Lifecycle Service Assurance
Mobile Infrastructure, Customer Experience Management, Service Assurance, Automation

Connected Devices
Wireless, Service Experience, Device Intelligence, Developer Tools

$ million	2016	2015
Revenue		
Networks & Security	**262.2**	239.2
Lifecycle Service Assurance	**99.2**	112.2
Connected Devices	**96.5**	125.7
	457.9	477.1
Adjusted operating profit[2]		
Networks & Security	**47.2**	34.6
Lifecycle Service Assurance	**11.2**	17.7
Connected Devices	**(4.4)**	(4.4)
Corporate	**(7.5)**	(5.8)
	46.5	42.1

Notes
1 Restated for changes to the Group's operating segments effective 1 January 2016 as set out in note 4 of Notes to the full year consolidated financial statements.
2 Before exceptional items, acquisition related costs, acquired intangible asset amortisation and impairment, goodwill impairment and share-based payment amounting to $87.6 million in total (2015 $32.0 million).

Networks & Security – To maximise the potential from the virtualisation of networks and the over-arching demand for security. This segment consists of the Cloud and IP, Application Security and Positioning lines of business.

The growth of cloud services from bandwidth-hungry content and hosting services and applications to "always-connected" social media drives innovation at a rapid pace. Service providers worldwide are investing in their networks to keep up with these performance demands. As they develop their virtualised products in line with these developments, there is considerable demand for Spirent test tools and services to measure performance in different operating environments and under different conditions. There is also strong demand for security testing solutions across the same types of customer and similarly strong demand for Spirent's products.

The new segment tests communications networks, services and applications and security in the lab during the development and product verification phase prior to launch. The value to customers is to allow them to launch new projects with confidence in network functionality and performance at scale with variabilities in traffic, reliability and security. Security is a critical growth opportunity, from all connected devices, networks and services to the provision of satellite time and position signals used in critical infrastructure applications and new applications, such as autonomous vehicles.

Lifecycle Service Assurance – Based on active testing, analytics and automated test management in production networks. This segment consists of the Mobility Infrastructure, Customer Experience Management, Service Assurance and Automation Platform Technologies lines of business.

In order to manage NFV in a complex hybrid network and to manage new services, network operators require active performance test systems for service turn-up and troubleshooting. These active test systems can be combined with analytics tools demanded by operators who are evolving from network-centric to customer-centric operations, and need to support new technologies, such as VoLTE, VoWi-Fi, 5G and IoT.

This segment's solutions enable the measurement of network performance and customer experience periodically and the rapid diagnosis of detected or reported network performance and customer experience problems.

Its purpose is to provide active testing and analytics in the operational network, with a focus on wireless service providers. Active test assurance helps customers stay ahead by reducing operating costs while maintaining the quality of service and user experience. It enables the real-time assessment of the network, allowing faster fault fixing and giving insight into the users' experience.

Connected Devices – Serving the future inflection in this market in the development of 5G wireless and the IoT.

This segment consists of the Wireless and Service Experience lines of business together with Communications Technologies Management (formerly Device Intelligence and Developer Tools).

The importance of wireless IoT connectivity continues to rise in a variety of segments from connected vehicles, homes and industry to smart cities. This results in challenges in developing and connecting IoT devices and applications and operating networks and applications on mobile and non-cellular networks, resulting in an attractive new market opportunity for Spirent.

This segment's purpose is to provide technical solutions to test the performance of wireless devices, primarily those that rely on cellular technologies, including smartphones but increasingly of any connected device. The next major technological wave under development is 5G wireless, as well as how to mitigate the concern around the security of many previously unconnected devices being linked to the network.

This segment has experienced significant decline from 2014 to 2016 due to the reduced spending in 4G R&D programmes and smartphone certification efforts by our customers. Over the next few years, we expect spending to increase in 5G R&D programmes and IoT network certification progress. The major product lines of our Connected Devices segment have been revamped to address these new market growth areas and have been successfully introduced to our customers in late 2016.

Business focus on the three strategic segments will facilitate the optimisation of investment in new solutions, their marketing and delivery of value to customers and the realisation of internal synergies.

Eric Hutchinson
Chief Executive Officer
2 March 2017

Spirent values in action

Our values are that we are competitive, customer focused, creative and collaborative. In the real-world this is demonstrated many times by our engineers. The world of network communications is no stranger to high profile outages and security breaches, many of which incur a financial penalty, either directly or in lost revenue. When issues are being discovered at customer sites, they are potentially revenue impacting and escalations can end up on the desk of the CEO. Such was the case recently when one of the world's leading network equipment manufacturers was faced with a massive challenge; reproduce a very complex customer network and make recommendations on configuration changes as well as fully test product updates that were being developed in real-time. Spirent leveraged its depth of leading hardware and software, and quickly assembled a team of field engineers who worked tirelessly through nights and weekends to ensure customer testing was successful. Not only was our customer successful, but Spirent's performance was recognised at the highest levels and Spirent was rewarded with continued investment.

How we drive our business forward.

1 Grow our business in our target markets

Description

Develop new products and services to grow our business in our target markets:

- High-speed Ethernet/IP, cloud and virtualisation, applications, mobile devices and networks, performance and security.
- Positioning, navigation and timing in global navigation satellite systems, communication networks and mission-critical applications (e.g. autonomous vehicles).

Importance

To achieve material revenue growth, we need to identify and capitalise on emerging new business opportunities in the target markets that we have decided to focus on and to expand the customers we serve.

Performance

Revenue

$457.9m

2015 $477.1m

Commentary

We identify, explore and assess new business opportunities in our target markets in a timely manner and objectively follow rigorous innovation management and portfolio management processes.

Risk

Technology change and employee skillbase.

2 Establish and maintain technology leadership

Description

- Continue appropriate levels of investment in product development.
- Participate actively in standardisation bodies and industry groups for emerging technologies.
- Work closely with our customers.
- Strengthen our expertise and experience.

Importance

We operate in highly competitive and specialised markets. If we fail to invest in the business at a sufficient level then we will see our market share decrease.

Performance

Investment in product development

$111.7m

2015 $118.3m

Commentary

In our largest markets, we currently believe that we have strong technology leadership positions after the investment in the business over the last three years. We have achieved significant new product launches in the year as a result of this investment.

Risk

Technology change and employee skillbase.

3 Strengthen our customer relationships

Description

- Partner with our customers.
- Create innovative solutions for customers' future needs.
- Focus on quality of service, delivery and support.
- Adopt account-based marketing and sales for top target accounts.

Importance

If we work closely with our customers, we have the best chance of understanding their current and future requirements. We want our customers to view Spirent as the expert that they turn to in order to solve their problems.

Performance

Revenue from top 20 customers

$240.6m

2015 $241.8m

Commentary

We have implemented salesforce customer relationship management software to improve our interaction with customers.

Risk

Customer dependence and business continuity.

Read more about KPIs on pages 20 and 21
Read more about principal risks and uncertainties on pages 24 and 25

Our strategy
Continuously innovate in test and measurement technologies to develop leading products and services for fixed and mobile voice, data and video applications and networks and to be recognised by customers for the ease of use and simplicity of our solutions for testing and measuring complex systems.

Key strategic actions
We have identified six key strategic priorities that we believe are critical in order to achieve our strategy and ultimately our vision.

Our vision
To be the leading experts in methodologies and solutions for the development and management of next-generation communications networks, connected devices and applications.

4 Acquire new capabilities and technologies

Description
Expand our portfolio through:

- Partnerships.
- Licensing of technologies.
- Purchase of businesses.
- Recruit and hire recognised experts in critical areas.

Importance
We have to be aware of other technologies we need and the skills to develop our new products and services.

Performance
Investment in M&A

$2.6m
2015 $6.7m

Commentary
We determined the level of investment we will make in each business unit and we consolidated the business units that will target the same customer and business segment.

We have identified the areas of interest for potential acquisitions that fit our strategic opportunities and gaps.

Risk
Acquisitions.

5 Invest in our people

Description
Our employees are central to our strategy and success:

- Find and attract highly qualified and skilled employees.
- Engage our employees through exciting work and opportunities.
- Retain the expertise and knowledge that we have built.

Importance
Our employees are our business. Our strategy is built around innovation and expertise. Without the best possible team, we will not be able to deliver on our strategy.

Performance
Voluntary employee turnover

9.1%
2015 7.3%

Commentary
We continue to see voluntary turnover well below industry benchmarking.

Risk
Employee skillbase.

6 Maintain financial strength and flexibility

Description
A robust balance sheet and strong cash generation allows us to:

- Invest in organic growth.
- Pursue strategic acquisitions.
- Pay sustainable dividends to shareholders.

Importance
Having financial strength and flexibility means that we are able to act quickly when we see an opportunity in our strategic priorities.

Performance
Free cash flow

$25.9m
2015 $35.3m

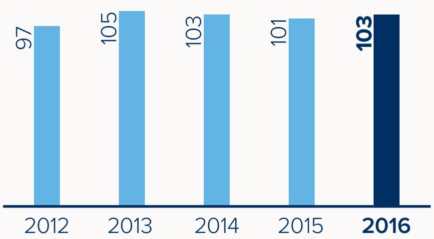
Commentary
We value strong financial diligence within the Group and ensuring that profit turns to cash remains a top priority.

Risk
Macro-economic.

The Board has identified the following key performance indicators to measure the Group's strategic progress.

Spirent's strategy focuses on medium to long-term growth and therefore its achievement cannot just be measured by looking at performance in 2016 compared to the prior year; trends over a number of years must also be considered. Key performance indicators relate to continuing operations only.

Book to bill ratio[1]

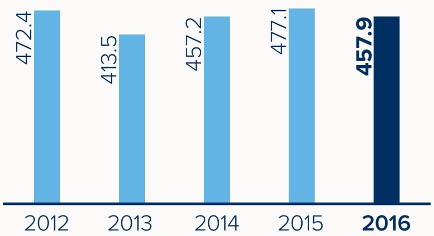


Reason for measurement
The ratio of orders booked to revenue billed is a measure of the visibility of future revenues at current levels of activity and provides an indication of the underlying trend in Spirent's future revenue stream.

Performance
The Group aims to maintain a book to bill ratio of 100 or higher. The 2016 ratio of 103 is a positive result. Order backlog increased by $13.8 million during the period.

Relevance to strategy
The book to bill ratio is an indicator of whether future activity levels are rising or slowing, and therefore how effective we have been in the execution of our strategy.

Revenue $ million

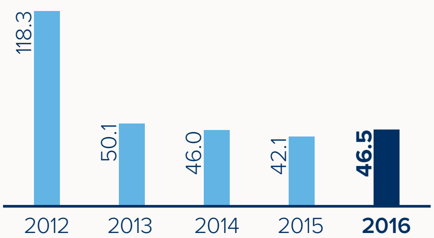


Reason for measurement
Spirent monitors growth in revenue as this shows how successful Spirent has been in expanding its markets and growing its customer base.

Performance
A reduction of 4 per cent following growth of 4 per cent in 2015, due to the impact of headwinds in wireless device test and non-repeating 2015 hand-held test tool revenue in Service Assurance.

Relevance to strategy
Revenue growth demonstrates all the aspects of our strategy; our success in expanding our markets both organically and through acquisition; maintaining technology leadership; and our strong relationships with our customers, all of which ensure that we continue to win and maintain business.

Adjusted operating profit[2] $million

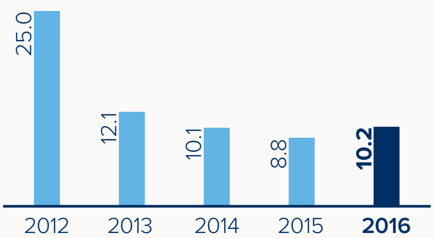


Reason for measurement
Adjusted operating profit is the measure used to evaluate the overall performance of the Group as well as each of the operating segments.

Performance
Adjusted operating profit increased by 10 per cent to $46.5 million from $42.1 million in 2015 as a result of improved gross margin and lower indirect costs.

Relevance to strategy
Adjusted operating profit indicates our financial strength and our ability to invest in the business for future growth.

Operating margin[3] %

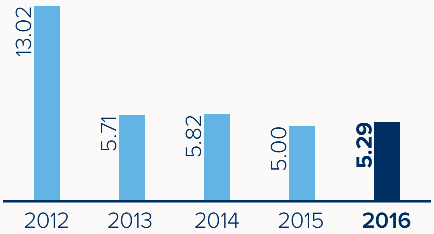


Reason for measurement
This is a measure of the Group's overall profitability. Spirent operates in markets which have high operating returns and strives to achieve best in class operating returns compared with its peers.

Performance
Operating margin increased to 10.2 per cent from 8.8 per cent in 2015 driven by the increase in adjusted operating profit.

Relevance to strategy
Operating margin is a measure of how successful we are in our overall strategy and demonstrates our ability to improve margin through efficient operations whilst being mindful of the need to invest for the future.

Adjusted basic earnings per share[4] (EPS) cents

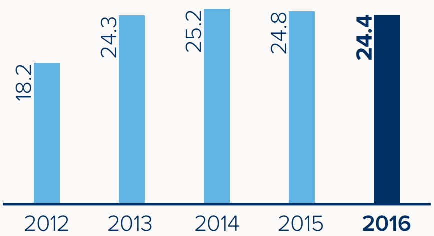


Reason for measurement
Long-term growth in adjusted basic EPS is a fundamental driver to increasing shareholder value.

Performance
Spirent's aim is to achieve growth in adjusted basic EPS. Part of the Executive Directors' remuneration is dependent on achieving EPS targets. In 2016, adjusted basic EPS grew by 6 per cent as a result of the increase in adjusted earnings.

Relevance to strategy
This is a measure of how successful we are overall in our strategy and ultimately how Spirent increases value for its shareholders.

Product development as a percentage of revenue %

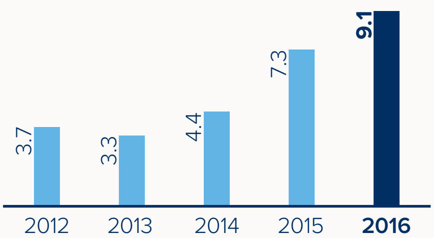


Reason for measurement
To maintain its competitive position Spirent must continue to invest to support future organic growth initiatives in line with the strategic objectives.

Performance
In 2016, we continued to invest in the 24-25 per cent range to ensure sustainable growth.

Relevance to strategy
It is critical that Spirent's product development investment keeps pace with the speed of change in technology, and that it is directed at the right key technology areas; it enables us to expand our markets and to maintain our technology leadership position.

Voluntary employee turnover %

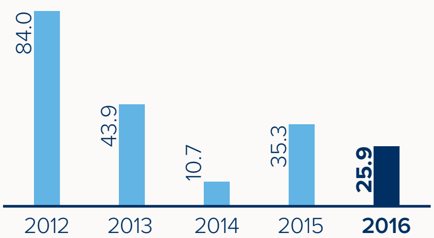


Reason for measurement
Spirent's success is dependent on its talented employees and therefore retaining them is extremely important. Voluntary employee turnover compared to industry average is the measure used to assess how well the Group has performed.

Performance
Although higher than 2015, staff turnover in 2016 remained below the industry average of 12.8 per cent.

Relevance to strategy
We cannot avoid the fact that some of our employees will move on but we can avoid a skills shortage by appropriately managing, recognising and rewarding our people. This KPI is a measure of how successful Spirent is in its strategy of investing in its people.

Free cash flow[5] $ million



Reason for measurement
Cash generation is a measure of the quality of Spirent's earnings. The aim is to achieve a high conversion of earnings into cash.

Performance
Free cash flow in 2016 was impacted by the payment of restructuring costs. The cash conversion ratio for 2016 was 0.8 times adjusted earnings (2015 1.2 times). See page 41 of the Financial Review.

Relevance to strategy
Having strong free cash generation reflects Spirent's ability to generate funds for future investment. It allows us to maintain financial strength and flexibility and pay sustainable dividends to our shareholders.

Notes
1 Ratio of orders booked to revenue in the period.
2 Before exceptional items, acquisition related costs, acquired intangible asset amortisation and impairment, goodwill impairment and share-based payment.
3 Operating margin represents adjusted operating profit as a percentage of revenue in the period.
4 Adjusted basic earnings per share is based on adjusted earnings as set out in note 12 of Notes to the full year consolidated financial statements.
5 Operating cash flow after tax, net interest and net capital expenditure.

Strong risk management underpins everything we do.

Risk Assessment

Identify → Assess → Mitigate

Review

Group Executive Committee → Audit Committee → Board

Like all businesses, Spirent is exposed to a number of risks and uncertainties. These risks may arise from internal factors, but some will be a result of external factors over which the Group has little or no direct control. It is the effective management of these risks that supports Spirent in delivering on its strategic objectives, safeguards the Group's assets and, over time, will enhance shareholder value. The process to identify and manage the principal risks and uncertainties of the Group is an integral component of the internal control system.

The risk assessment process starts in the businesses, where up-to-date risk registers are maintained and updated as part of the normal operating and control procedures. Each business identifies its key risks and mitigating factors and nominates a risk owner. The impact and the likelihood of occurrence of each risk is ranked, which assists the Group Executive Committee in assessing the likely impact in aggregate of each risk to the Group as a whole. The individual businesses are required to update their risk registers periodically to reflect new or emerging risks as they are identified.

It is not possible to identify every risk that could affect the business and the actions described below to mitigate those risks cannot provide absolute assurance that the risk will not occur or adversely affect the operating or financial performance of the Group.

The Board has classified the principal risks by the impact the risk would be expected to have on the Group should it occur, and the anticipated likelihood that that risk may occur using the following classifications:

Risk	Impact
Impact	High Medium Low
Likelihood of occurrence	Likely Possible Unlikely

The Board takes the view that a High impact risk could lead to a 10 per cent or more reduction in turnover, a Medium impact risk a 5 to 10 per cent reduction in turnover and a Low impact risk a reduction of up to 5 per cent of turnover.

The Audit Committee reviews and monitors the Group's risk processes and reports to the Board on their effectiveness. Risk is considered by the Audit Committee at least three times per year, at which time risk registers for both the Group and the material business units within the Group are reviewed. The Audit Committee challenges and debates the risks with reference to risk tolerance and appetite, as set by the Board. Progress made and any further actions to be taken regarding mitigation plans, as well as any changes to the risk profile, are discussed in detail.

The Board had identified the following principal risks, each of which is discussed on pages 24 and 25:

Risk	Impact	Likelihood	Change*
Macro-economic change	High	Likely	‹ ›
Technology change	High	Likely	‹ ›
Customer dependence/Customer investment plans	High	Likely	^ ^
Competition	Medium	Possible	‹ ›
Acquisitions	Medium	Possible	‹ ›
Business continuity	High	Possible	‹ ›
Employee skillbase	Medium	Possible	‹ ›

* The Board's view of the likelihood of occurrence and/or impact has changed (combined) compared with the prior year.

Risk appetite and developing the Viability Statement

Provision C.2.2 of the 2014 UK Corporate Governance Code requires the Board to assess the viability of the Group over a suitable period.The Board has determined that a three year period should be used when assessing viability, as explained on page 87 of this Annual Report.

The Board has sought to frame its risk appetite in terms of the markets and technologies in which it is prepared to make significant investments, and those in which it would expect its scale of investment to be more modest. Except where very attractive opportunities were to present themselves to achieve greater scale in well-known markets, the Board would expect to maintain a significant net cash position.

Management, together with members of the Board, considered which of the principal risks, either alone or in combination, might threaten the Group's viability. The expected aggregate impact of Macro-economic change, Technology change, Customer dependence and Competition were modelled based on historical trends experienced across the Group. A severe but plausible combination of those risks was considered for the purposes of deciding what turnover and free cash flow scenarios should be stress-tested. The impacts were modelled over the three-year period, with emphasis on a stressed scenario in years two and three, given the management's view that such risks were unlikely to materialise in year one, as the Group had just completed a detailed full year budget for 2017. Assumptions were made about the ability of the Group to take successful mitigating actions, including the ability to make significant reductions in its non-fixed operating costs. The Board took into account the Company's significant cash balance of $96.1 million at 31 December 2016 and the ability of the Company to continue to generate positive free cash flow even in stressed scenarios.

The Board reviewed and discussed with management:

- the process undertaken by management to decide which scenarios to stress test;
- the results of the stress testing performed, including an illustration on the reduction in turnover and availability of cash; and
- the ability of management to successfully take the mitigating actions identified.

The resulting Viability Statement is set out in the Directors' report on page 87.

The principal risks and uncertainties currently faced by the Spirent Group.

Risk	Potential impact	Mitigating actions
Macro-economic change Spirent is a global business exposed to current world economic conditions and political uncertainties over which it has no control. The business is also exposed to government spending priorities, principally in the United States.	Deterioration in economic conditions and a change to the terms of conventional international trade may lead to a reduction in the level of demand for Spirent's products and services and cause customers to delay their purchasing decisions.	The Group closely monitors both market and geographic trends in order to respond to changes in demand and be in a position to take timely actions to protect profitability where possible. In addition, Spirent has a large number of geographically diverse customers, which may mitigate the impact of issues in any one area.
Technology change Spirent sells complex solutions in industries that can be subject to rapid technological changes. Testing new technologies drives our business, but the opportunity also brings high risk since keeping at the forefront of these key future technologies is critical to our success and to ensuring that we remain competitive in our markets. It is critical that our product development investment is directed at the right areas in order to deliver the solutions that our customers need, when they need them. Spirent's success is dependent in part on proprietary technology which may be infringed by others. Protecting the Group's proprietary technology is important to enable Spirent to compete successfully.	If product development investment does not keep pace with the speed of change in technologies, or if it is not directed at the right key areas, our competitive position and financial performance will suffer. If Spirent's solutions take longer to develop than anticipated or longer to develop than our competitors then our competitive position and financial performance will also suffer. Changes in technologies may lead to a short-term pause by our customers investing in our solutions. Intellectual property claims can result in significant defence costs, and may affect Spirent's ability to market its products.	All Spirent's businesses work very closely with customers and remain focused on their requirements. Each business makes investment decisions specifically related to their solutions portfolio based on market needs. Spirent continues to make a significant investment in product development. In 2016 the investment was $111.7 million (2015 $118.3 million). Spirent has active intellectual property protection programmes in place to obtain appropriate protection in a cost-effective manner.
Customer dependence/customer investment plans The Group sells its products and services to a wide range of companies and continually seeks to expand its customer base. In 2016, no one customer accounted for more than 10 per cent of Group revenue, although the top 10 customers represented 40 per cent of Group revenue (2015 39 per cent). In some of our markets certain customers have a dominant market share, which makes doing business with these customers and their suppliers critical to the success of our business. In addition, many of the companies with which we do business are some of the largest global telecommunications corporations. Therefore meeting our development obligations, producing high quality products, and being on time are vital to Spirent's reputation and success. Changes in our major customers' priorities in technology investments can also have a significant impact on their spending on Spirent products and by those in the customers' supply chain. The industry continues to experience consolidation which does disrupt the spending patterns of affected customers.	Loss of one or more of Spirent's major customers could have a significant impact on Spirent's financial results. Spend on Spirent's products is often capital in nature and so customer spend can fluctuate significantly from year-to-year. Significant failings in either quality or being able to deliver in the appropriate timescale could cause long lasting damage to Spirent's reputation and relationships. Over recent years there has been significant consolidation in our customer base amongst the service providers and network equipment manufacturers. This trend continues and the resulting delays in spending thereby reducing demand for Spirent's solutions and services and also reduce the potential number of customers to whom those solutions and services could be sold. Changes in our customers' technology investments can result in reduced spending on our existing solutions before customers and those in the customer's supply chain increase spending on new technologies.	Strong customer relationships are critical to Spirent. We aim to provide innovative solutions which meet customers' needs and we place great emphasis on providing professional service and support. One of the Group's strategic objectives is to invest in deepening our customer relationships. We place engineers on-site with our customers, undertake site surveys of the use and intended plans for the use of test solutions in their business. We seek to establish thought leadership in our industry through participation in standards bodies and industry forums, which in turn creates additional links with customers. Our approach is to play a key part in the wider supply chain to our key service provider customers by aligning with early adopters of technology.

Risk	Potential impact	Mitigating actions
Competition Spirent operates in a range of highly competitive niche markets which experience rapid technological change. In order to compete effectively it is necessary to establish and maintain technological differentiation in our solutions. The Group faces competition from new market start-ups as well as more established and well-resourced companies. Industry consolidation amongst our direct competitors may bring about a shift in competitive advantage.	Actions by competitors and increased competition can bring about pressure on Spirent's gross margin. These factors could also affect Spirent's competitive position, thereby reducing revenue and consequently affecting financial results. In the last two years significant consolidation has been announced in our sector. As competitors merge, this brings opportunities for Spirent but can also change the competitive landscape as competitors are able to leverage enhanced product capabilities or sales channels.	The Group's broad solution portfolio, market-leading capabilities and customer focus continue to address this risk. Spirent aims to maintain market-leading positions through significant investment in the development of differentiated products. Competitor activity is closely monitored with a view to maintaining clear differentiation based on Spirent's products, services and global reach.
Acquisitions A key element of Spirent's strategy is to develop new capabilities and technologies, sometimes through acquisition. Integration of acquisitions can be a complex process and the results expected from acquisitions may not be achieved due to problems encountered in integration, changes in market conditions, the rate of adoption of new technologies, or sometimes deficiencies arising in the due diligence processes.	Underperformance by acquisitions will impact the Group's results and may lead to impairment of goodwill and/or intangible assets.	Rigorous strategic and financial evaluations of all acquisition opportunities are carried out. Detailed financial and commercial due diligence is performed. The Board will only authorise transactions after all due diligence has been successfully completed and where the financial hurdles are within the agreed guidelines. Integration plans and processes are carefully considered prior to acquisition. The Board reviews post-acquisition performance.
Business continuity Operational risks are present in the Group's businesses, including the risk of failed internal and external processes and systems, human error and external events, such as a natural disaster or cyber security attacks. For example, a significant portion of our communications operations are located in California which has in the past experienced natural disasters, including earthquakes and wildfires. Contract manufacturers are used for the manufacture of a substantial amount of Spirent's products. Spirent's major contract manufacturer is located in Thailand. The incidence of cyber-crime continues to rise. Spirent is dependent on its information technology systems for both internal and external communications as well as for its day-to-day operations.	A significant natural disaster could disrupt the Group's ability to conduct business and adversely impact revenue and operating results. Disruption, financial problems of contract manufacturers or limitations in their manufacturing capacity could limit supply and/or increase cost. If a cyber-attack were to be successful it could result in loss of data, confidential information and damage to Spirent's intellectual property, causing major disruption to the business. There would also be a potential impact to Spirent's credibility in the security market.	An important component of Spirent's corporate governance is its risk management strategy. IT disaster recovery plans are in place for all core business systems and ensure that the wider operations are all fully covered. Regular meetings are held with contract manufacturers and a regular on-site presence is maintained. In addition, the Group's largest manufacturing subcontractor has multiple worldwide sites and comprehensive business continuity plans. During 2016 we continued with a programme of work to improve processes and procedures in the area of cyber security including the use of our own cyber security specialists.
Employee skillbase Spirent is its employees. Attracting and retaining highly qualified and skilled employees is essential to enable the Group to deliver on its strategy and to the success of the business.	Intense competition is faced for personnel from other companies and organisations and the loss of key employees, the failure to attract and retain other highly skilled employees, or the failure to adequately plan for succession may impair Spirent's ability to run and expand the business effectively.	Investing in people is at the core of the Group's strategy. The aim is to find, keep and engage the highest calibre of employees and encourage their contribution and development. An environment that fosters innovation and collaboration is critical to Spirent's success, as is ensuring incentive plans are competitive. Succession planning for senior posts in the Company is reviewed periodically by the Board. Appropriate career paths and internal recognition programmes are developed for both technical and non-technical staff. Regular reviews are performed to ensure that all elements of compensation across the Group are competitive with the market.

NETWORKS & APPLICATIONS

Spirent's Networks & Applications solutions test the performance and security of new products in the lab and on service provider and enterprise networks.

Revenue

- 2016 $259.4m
- 2015 $244.0m

Operating profit[1]

$25.2m
2015 $18.9m

Operating margin[1]

9.7%
2015 7.7%

Note
1 Before exceptional items.

Networks & Applications develops performance and security test systems for next-generation networks and applications, simulating real-world, high-capacity conditions in the lab and on the network. It provides test automation, orchestration and management systems. The portfolio covers high-speed Ethernet/internet protocol (IP) for data centers and networks, cloud, virtualisation, applications, security, and mobile networks.

What we test

High-speed Ethernet/IP, cloud and virtualisation

Our high-speed Ethernet/IP test systems help our customers validate high-speed network infrastructures, up to 400G Ethernet speeds, ensuring network functions and services can scale to millions of subscribers, and to assess the security of devices, networks and applications. These test systems target developers of devices, network equipment or applications and are applicable for data centers, network operators, cloud and service providers.

Applications and security

Applications and security test products and services offer unprecedented realism, threat modelling and ease of use, addressing the proliferation and complexity of application and vulnerability concerns for enterprise, government and service provider networks.

Mobile infrastructure

Mobility solutions emulate subscribers and adjacent nodes to enable active testing of mobile network equipment and networks – mobile core, Wi-Fi, IP multimedia subsystems and Diameter networks – in the lab and in the network.

Test automation and orchestration

Industry leading lab-as-a-service and automation solutions deliver efficient, scalable and cost effective physical and virtual build, test and deployment environments to wireline and wireless service providers, network equipment manufacturers or anyone actively developing software-enabled virtual networks.

Performance highlights

- Revenue up 6 per cent to $259.4 million with improved operating margin.
- Strong demand for high-speed Ethernet test solutions from switch and router to firewall testing.
- Carriers adapting virtual test solutions globally in network functions virtualisation (NFV) trials.
- First deployment of a 400G Ethernet test solution with major network equipment manufacturer.
- Completed our security test product (CyberFlood) and launched our security consulting practice (SecurityLabs).

Revenue

Networks & Applications revenue grew by 6 per cent to $259.4 million in 2016 (2015 $244.0 million), driven by strong demand for high-speed Ethernet and test automation.

Profitability

Revenue growth in conjunction with a focus on cost control delivered an increase in operating profit before exceptional items of 33 per cent with an improved operating margin, up 2.0 percentage points.

Impact of market dynamics on Spirent business

Increasing demands on network performance

The growth of cloud services from bandwidth-hungry content and hosting services and applications to "always-connected" social media drives innovation at a rapid pace. Service providers worldwide are investing in their networks to keep up with these performance demands. There was strong demand for 100G Ethernet testing by data center network equipment suppliers as they move to four 25G lanes from ten 10G lanes for 100G interface. As network equipment manufacturers develop new routers, switches and other network equipment for service providers, network equipment manufacturers, service providers and third-party test labs buy Spirent test systems to measure and validate their performance.

Virtualisation

The industry is in the midst of a revolutionary technology transformation, with virtualisation enabling technologies, such as software-defined networks (SDN) and NFV. As developers and service providers develop their virtualised products, they demand Spirent test tools and services to measure performance in different operating environments and under different conditions.

Mobile network and services rollout

The investment in mobile network expansion, operation and management remains a priority for network operators. As 4G LTE rolls out globally, there is wider commercial deployment of VoLTE, more 3G and LTE connected vehicles and an increase in the Internet of Things (IoT) applications. Each of these brings revenue opportunities for service providers, along with scale and performance demands for mobile and wireline networks. Network equipment manufacturers buy test systems to develop and test their products in the lab and in the network. Network operators buy test systems to qualify and validate the network equipment and to actively test new functionality and performance of their network and services.

Security vulnerabilities and threats

There is strong demand for security testing solutions across network equipment manufacturers, service providers and enterprise customers. Double digit revenue growth has been reported across our security customer base. These growth numbers represent spending increases on network security solutions at enterprises and service providers. Equipment providers with security capabilities, service providers, enterprises and government organisations contract our SecurityLabs service, providing security experts to assess the product or service and provide reports, on a one-time basis or periodically. Additionally, they purchase application and security products to evaluate the functionality and performance themselves.

Accelerate time to market and reduce costs

Responding to the challenges to accelerate the time to market for new products and services and to reduce development and testing costs, new processes for developing and delivering the products and services are being adopted across the industry. Processes and best practices around agile development have spawned an increase in DevOps methodology, the aim of which is to create tighter linkages between developers, operations and testers through the use of automation and communication. Automation continues to be a high priority for customers, driven by business imperatives to maximise lab assets and reduce test cycles, while embracing agile development and DevOps to accelerate the pace of development and deployment of new devices, networks, applications and services.

Strategy

Spirent aims to be the leading provider of performance testing systems for Ethernet/IP for data centers and networks, cloud and virtualisation, applications, mobile infrastructure and security. Spirent provides the capability to create and transmit complex and high-capacity traffic.

The business strategy can be summarised as:

- Lead in data center and wide area network high speed Ethernet and IP performance test.
- Invest in software-as-a-service (SaaS) for SDN and NFV test methodologies.
- Expand our security test offerings with new security test tools and our consulting services.
- Extend the capabilities for mobile infrastructure testing in the labs.
- Meet emerging requirements for new active tests in the operational network.
- Expand the footprint of our test automation, orchestration and management systems.

Product development

High-speed Ethernet/IP, cloud and virtualisation

Spirent grew its leadership in high-speed Ethernet, winning a major industry award for the industry's first public interoperability demonstration of 400G Ethernet implementations, in conjunction with Huawei. In addition, we launched a 100G test solution supporting the latest optical transceivers, helping drive further 100G adoption with a small form factor and support of 25G lanes.

Spirent launched several new products in 2016:

- Spirent Temeva, a SaaS solution for network and cloud testing, initially offers web-based applications covering network traffic testing, NFV infrastructure benchmarking, cloud performance and capacity planning.
- The industry's first Quint-speed high-speed Ethernet product family covering 100G, 50G, 40G, 25G and 10G Ethernet.

Spirent and Huawei complete the highest density 7.2Tbps switch line card forwarding performance test

The demand for network bandwidth is increasing at an ever-higher rate. In an effort to satisfy the requirements of network equipment manufacturers in developing highly flexible products to support single-port 100/50/40/25/10G speed, Spirent released the world's first Quint-speed testing module for its flagship testing platform Spirent TestCenter, capable of verifying next-generation data center architectures and routers.

Partnering with Huawei, Spirent showcased the new module and its advanced testing solutions for carrier networks, access and Wi-Fi networks, data center networks, SDN and NFV and cloud systems and cloud services.

"We are pleased to partner with Spirent to verify the forwarding performance of the 7.2Tbps switch line card in a joint field test, which yields very satisfying test results. Huawei is determined to keep cooperating with our industrial partners and building cloud networks with higher quality for our customers."

Yu Li
General Manager for Data Center Networks at Huawei

- the industry's first 2.5G and 5G BASE-T Ethernet test solution, enabling enterprise and service providers to quickly and efficiently deploy scalable high-capacity solutions; and
- support for 802.11ac on the Spirent TestCenter WLAN test capability has the highest-performing and most realistic 802.11 WLAN multi-client emulation scenarios available on the market today.

Applications and Security

In 2016, Spirent launched a new ethical hacking service, SecurityLabs, and a new security and applications performance test product, CyberFlood. CyberFlood is the world's highest performing layer 4-to-7 testing solution, emulating realistic application traffic while validating security coverage from enterprise to carrier-grade network capacity. CyberFlood has a library of tens of thousands of realistic applications and attack vectors and is regularly updated to ensure load and functional testing with unparalleled scalability, thus providing elevated security assurance.

Mobility infrastructure

Spirent enhanced its industry-leading mobile infrastructure test product (LandSlide) with a Wi-Fi radio frequency interface and voice over Wi-Fi (VoWi-Fi), enabling carriers to validate VoWi-Fi to VoLTE handovers. We tackled the important issue of predicting and preventing signalling storm outages caused by "always-connected" applications and smartphones that disconnect to save battery life, with the release of a Diameter performance and scale testing solution for mobile operators.

Spirent launched a high-capacity server (S100-M2) that allows customers like Nokia (as announced in a press release on June 21, 2016)[1] to test at a very high scale. In the Light Reading evaluation of Nokia's Virtualised Mobile Gateway, the LandSlide C100-M2 test platform enabled us to generate a real-world mix of consumer and IoT, control, and data-plane traffic to demonstrate Nokia's outstanding performance, scalability and readiness for market. Nokia demonstrated massive scale of 60 million UEs and 120 million bearers on a single blade server.

In addition, Spirent released a new small-scale product for active testing in the operational network (LandSlide EDGE).

Automotive test

In 2016, Spirent launched the OPEN Alliance Special Interest Group conformance test suite and its AUTOSAR conformance test suite, which complement the Spirent TestCenter system and utilise our popular TTCN-3 workbench; this automates the full range of relevant test steps within a single tool for automobile manufacturers and their engineering services partners.

Test automation and orchestration

In 2016, Spirent enhanced the Velocity product, the robust virtual and physical testbed orchestration and test case management solution for facilitating lab management, scheduling and executing and analysis of test cases, and the iTest product, the integrated test authoring and execution solution for rapidly developing, automating, and maintaining test cases.

There were orders from several large opportunities with diverse customers including AT&T, Cisco, Nokia, F5 and Palo Alto Networks. AT&T has selected Velocity to be part of the Domain 2.0 initiative and Nokia has selected Velocity to be the lab management solution for their 5G Lab Transformation initiative.

Source

1 Customer quotation from the Spirent press release on June 21, 2016.

Streamlining virtual deployment

As the China Unicom preferred test vendor, Spirent jointly executed a series of functional and performance tests to address specific requirements of network functions virtualisation infrastructure (NFVi) and middleware that ultimately give end-users seamless access to many new applications and services.

The tests comply with current industry standards and utilise advanced, best practice testing methodologies. Spirent enables network equipment manufacturers, cloud and service providers to consolidate and scale test lab operations, modernise test labs as a cloud-based service and streamline continuous deployment when testing virtual network functions in the hybrid network.

VALIDATING VIRTUAL NETWORK PERFORMANCE...

...TO ACCELERATE DEPLOYMENT OF VIRTUALISED NETWORKS

WIRELESS & POSITIONING

Spirent's Wireless & Positioning solutions accelerate the time to develop and launch smartphones, connected devices, new services and global navigation satellite systems.

Revenue

- 2016 $118.5m
- 2015 $137.2m

Operating profit[1]

$17.1m

2015 $14.9m

Operating margin[1]

14.4%

2015 10.9%

The Wireless & Positioning business develops test systems to verify the functionality and measure the performance of wireless devices, such as smartphones, tablets, connected cars and the Internet of Things (IoT). We develop channel emulators to accurately simulate the complex effects of signal fading on wireless transmissions. We develop systems that simulate, record and playback and detect interference for global navigation satellite systems (GNSS).

What we test

Wireless device test

We develop testing systems for testing functionality and measuring the performance of 4G LTE and 3G mobile devices and services:

- Research and Development. Spirent offers a range of innovative industry-leading test systems that are easy to configure and use for testing any or all flavours of LTE technology, including LTE-Advanced, FDD and TDD.
- Conformance and Certification. Spirent helps manufacturers, application developers, and operators address signaling, data throughput, mobility, and other cellular specification conformance requirements for LTE, UMTS, CDMA or EV-DO.
- Carrier Acceptance. Leading carriers demand performance that goes far beyond industry-standard conformance. Spirent's solutions enable users to validate the most stringent requirements, including IMS signaling themes, mobility scenarios and user experience evaluation.

Location test

Spirent's Location Technology Solution (8100 LTS) is the most comprehensive, cutting-edge solution for wireless device and chipset location technology testing, addressing both indoor and outdoor testing scenarios covering E911, eCall, A-GNSS, OTDOA and cellular positioning. The platforms span conformance, certification, and operator acceptance of mobile device and chipset design, and can be architected to accommodate both full-rack or desktop environments in testing location-enabled 2G, 3G and 4G LTE devices.

Spirent's C2K-ATS is an automated, easy to use, accurate and scalable single-platform solution for testing wireless 1X and EV-DO Rev. 0/Rev. A/Rev. B handsets and terminal devices.

Our eCall/ERA-GLONASS In-Vehicle Test System is a complete test system for verifying the functionality and conformance of the eCall and ERA-GLONASS IVS, the emergency call systems.

Channel emulation

Spirent has a family of channel emulators. The latest generation (Vertex) is the world's most scalable channel emulation platform that accurately simulates the complex effects of signal fading on wireless transmissions. The system enables the test and evaluation of a broad range of applications with a variety of channel densities.

Positioning, navigation and timing

We have a portfolio of tests systems and services to support the development of positioning, navigation and timing systems for military, space, research and other high-precision applications:

- The Spirent GSS9000 GPS/GNSS simulator is the world-leading global navigation satellite system GNSS/GPS test solution, giving the very best in performance, flexibility and capability of any GNSS test solution.
- The Spirent GSS7000 series Multi-GNSS Constellation Simulator targets R&D, verification and integration testing of location-enabled civilian and consumer products.

Performance highlights

- Operating profit up 15 per cent despite slowing of mobile device and network equipment manufacturers spending.
- Strong growth in US for positioning, navigation and timing business.
- Launched next-generation scalable and modular channel emulator (Vertex).

Note
1 Before exceptional items.

- Won deal in large US carrier to reduce time and cost to test IoT devices.
- Leading video and audio quality testing solution; first to market with enhanced voice services (EVS) high-definition.

Revenue
Wireless & Positioning revenue in 2016 was $118.5 million, a decrease of $18.7 million or 14 per cent on 2015. The fall in revenue was due to the previously flagged decline in the wireless device test market. There was strong demand in Positioning from increased US government wins which helped to offset some of the weakness in the wireless device test business.

Profitability
Operating profit before exceptional items increased by $2.2 million in 2016 despite the decline in revenue. Targeted cost reduction actions taken at the end of 2015 more than offset the loss of gross profit from lower revenue and led to an improvement in operating margin of 3.5 percentage points.

Impact of market dynamics on Spirent business

Economic pressure and consolidation in wireless device supply chain
While the wireless test market continues to be fiercely competitive, the market for positioning and timing solutions remains robust. The market for smartphone test equipment is estimated to shrink at 5-10 per cent annually[1], as the wireless component, module and network equipment manufacturers' spending has slowed in a cyclical market lull between ongoing 4G enhancements and the very early days of 5G. Intel stopped many of its smartphone chipset programmes and consolidated a large number of its sites. Broadcom exited one of their last cellular-related modem businesses by selling its IoT chip programme to Cypress. For the first time, analysts are forecasting a slowing decline in iPhone sales as device replacement cycle times continue to creep higher. Major operators are streamlining their operations reducing their internal lab test investments and tool consolidation. Economic pressure and consolidation of top-tier global smartphone, chipset and network equipment vendors continued in 2016, resulting in a fiercely challenging, competitive and shrinking market.

4G LTE services growth with voice over LTE (VoLTE)
Spirent benefited from the development phase of 4G LTE services, such as VoLTE, and voice over Wi-Fi and the focus on the user experience. This partially offset the headwinds in the device test market.

Growing opportunities and challenges in IoT
The importance of wireless IoT connectivity continues to rise in a variety of segments from connected vehicles, homes and industry to smart cities. This results in challenges in developing, connecting and operating IoT devices and applications on mobile and non-cellular networks, resulting in an attractive new market opportunity for Spirent.

Increasing awareness of GNSS vulnerabilities
Spirent provides test systems for the GNSS with a focus on expert users in the military and government and in commercial applications. The market is about $100 million with low single-digit growth, with peaks of incremental revenue driven by government spending or the introduction of new constellations. Throughout 2016, there was increasing awareness of the vulnerabilities and potential threats to GNSS receivers, systems and applications, creating opportunities for solutions that can detect, analyse and deal with these threats. The positioning and timing test market is forecast to grow, driven by the demand for systems to test for system vulnerabilities, emerging applications (such as drones and wearables), and the need for precise timing across networks, primarily in the telecommunications and banking sectors.

Strategy
Spirent's strategy focuses on accelerating time to market and reducing cost to develop and launch new devices and services, while helping to ensure the highest service quality and user experience. Investment is being made in wireless device test products for development, location and carrier acceptance, while adapting those products and offering new services to meet the emerging requirements and changing customer expectations for IoT and 5G. Developers seek to accelerate the development of connected devices and to test and qualify devices to ensure they can connect to networks and operate reliably. Spirent's expertise includes testing user experience of converged services and devices that support them, including video, data and voice both as they are developed and as they are deployed on the networks. Investment is being made in the channel emulation product family, in particular to meet the requirements for 5G.

Spirent's leading position in the positioning, navigation and timing business will be enhanced by expanding into selected commercial market segments and developing new products and services for detecting and testing for

GPS accuracy contributes to on track success for Aston Martin Racing
For any engineer incorporating satellite positioning into a product, system or device, the resilience and reliability of the resulting data instantly become critical to the user's experience, making testing essential. But there can be few applications where the connection is so direct – or the results so instantly public – as in motor racing.

Spirent worked with Aston Martin Racing at their UK base and at track test sessions to evaluate automotive technologies including the accuracy and performance of GPS receivers and monitor for interference on the championship-winning 2016 V8 Vantage GTE race cars.

"Using Spirent tools during testing means we can capture data and simulate many on-track scenarios in a controlled and repeatable environment back at base, which is a process that is invaluable when benchmarking our GPS receiver accuracy and performance throughout the season."

Paul Howarth
Team Principal Aston Martin Racing

vulnerabilities. In 2016, Spirent expanded into the GNSS vulnerabilities market providing products and services to assess and improve the robustness of receivers, equipment, applications and systems and to detect interference or spoofing in operational environments.

Product development

Spirent provides innovative solutions for testing connected devices that address challenges to accelerate time to market and reduce test time for new services and applications like VoLTE and VoWi-Fi, expanding our 8100 carrier acceptance and conformance test portfolio, and launching our next-generation Channel Emulator. The Channel Emulator emulates the radio frequency channel between transmitter and receiver to test performance of the latest complex antenna and receiver designs.

Spirent's mobile device Location Technology Solution (LTS) has passed Assisted BeiDou (A-BeiDou) certification from the 3GPP Global Certification Forum (GCF). The GCF is jointly established by multiple operators, mobile device vendors, test solution providers, and testing facilities. Spirent LTS is the only A-BeiDou testing platform in the market with this GCF certification.

Spirent introduced the new Channel Emulator (Vertex) at Mobile World Congress in February 2016. This product family addresses the advanced 4G and 5G applications and provides higher channel density by using half the space of competitive solutions.

Spirent's channel emulators (Vertex and VR5) have been included in the recently-released multiple-input multiple-output (MIMO) Authorised Equipment List for CTIA's Test Plan for 2x2 Downlink MIMO and Transmit Diversity Over-the-Air (OTA) Performance, Version 1.1. The long awaited CTIA Test Plan focuses on evaluating the performance characteristics of wireless MIMO devices, which are highly prevalent in LTE networks and increasingly important as the industry moves toward 5G. Release of the Equipment List is the next step in preparing global test labs to obtain CTIA certification, a crucial part of the process toward mandating the new standard.

Spirent developed solutions to detect and analyse vulnerabilities in GNSS. The Robust Positioning, Navigation and Timing Test Framework enables threats to be detected in the field, taken into the lab and re-synthesised along with GPS and other GNSS signals.

In 2016, several new positioning products were released:

- a new mid-range solution (GSS7000). The GSS7000 is a multi-frequency, multi-GNSS RF constellation simulator and provides a modular-approach to multi-frequency testing, targeting developers of receivers, systems and applications who want to take advantage of new satellite navigation systems and the better accuracy offered by civilian, multi-frequency GNSS.
- new Record and Replay system (GSS6450), the smallest and most portable RF record-and-replay system. The GSS6450 captures the most complex RF signal environments and interference in more detail than ever.
- new interference detector (GSS100D). The GSS100D monitors the RF environment for potential sources of interference to GPS/GNSS systems and automatically detects potentially disruptive events at a location, characterises the RF interference waveform, and stores as digital samples. Multiple detectors may be used for detecting interference across larger sites such as critical infrastructure, logistics or transport hubs. When an interference event is detected, waveforms and accompanying observations are recorded in a database that, over time, builds up a complete picture of interference activity in the vicinity of the detector antenna. The captured waveforms can then be re-synthesized and introduced to GNSS receivers.

Source

1 Spirent management estimate based on primary research on capital equipment budgets with our largest customers and observations of competitors in the market.

Over-the-Air mobile device testing

While 5G standardisation efforts are working towards a target of 2020 commercialisation, early testing and development are already well underway and comprise a vital aspect of creating the future of our global mobile technology.

ETS-Lindgren successfully partnered with Spirent to remain at the forefront of testing MIMO OTA standards and carrier-specific performance requirements that utilise an increasing number of antennas required to deliver enhanced 5G service coverage and improved user experience for mobile applications especially video.

ENSURE MOBILE DEVICES DELIVER HIGHER DATA RATES AND MORE ROBUST COVERAGE...

...TO ADDRESS NEXT-GENERATION SERVICES PROMISED WITH 5G

SERVICE ASSURANCE

Spirent's Service Assurance solutions turn-up new services, measure service quality and customer experience, and diagnose and troubleshoot network performance and customer experience problems.

Revenue

- 2016 $80.0m
- 2015 $95.9m

Operating profit[1]

$11.7m
2015 $14.1m

Operating margin[1]

14.6%
2015 14.7%

The Service Assurance business develops distributed systems for service turn-up and performance measurement in the network and analytics solutions for identifying and troubleshooting problems with network performance or customer experience. We offer products and services to measure the user experience on various networks. We have portable field service test tools for network operators.

What we test

The Service Assurance business develops products and services that enable service providers to turn-up new services, measure service quality and customer experience, and diagnose and troubleshoot network performance and customer experience problems.

Service assurance

Spirent's service assurance solution (Lumos) helps service providers to turn-up new services and diagnose and troubleshoot issues within mobile backhaul, business services and global internet protocol (IP) networks to support Ethernet service delivery.

Customer experience management

Spirent's customer experience management solution (InTouch) helps service providers to identify critical network issues affecting customers and reduce churn by aggregating and analysing data from multiple sources to provide insights into their customers' experience.

Service experience

Spirent's Umetrix platform accelerates user experience evaluation for new devices and services. Umetrix automates launches, readiness assessments for services, device acceptance and pre-testing, eliminating test setup errors, and accelerating data aggregation and reporting.

Field testing

Spirent's portable field test product (FLEX) for service providers enables qualification of the service and troubleshooting of transport and service related issues within the consumer's home and in the outside plant.

Performance highlights

- Despite a decline in revenue of 17 per cent, operating margin before exceptional items held at 14.6 per cent.
- New Service Assurance product (Lumos) completed and launched.
- Significant sales of 100G Ethernet probes for service assurance.
- New InTouch Customer and Network Analytics (CNA) product completed and first customer system has been installed.

Revenue

Service Assurance revenue decreased by $15.9 million or 17 per cent to $80.0 million in 2016, compared to $95.9 million in 2015. The previously flagged decrease was due to the recognition of the second part of a non-repeating contract for hand-held test tools in 2015.

Profitability

Operating profit before exceptional items in 2016 was down $2.4 million with operating margin maintained at 14.6 per cent. This was a positive result in the context of the revenue fall and was achieved by a focus on cost control and an improvement in gross margin driven by product mix.

Impact of market dynamics on Spirent business

Spirent targets the mobile service assurance market and the customer and network analytics markets, in particular, competing in the service management, performance management and probe-based systems segments.

The present business depends on the service providers' investment in Ethernet/IP services, virtualisation, in-home data services, carrier Wi-Fi and mobile technologies, such as long-term evolution (LTE), voice over LTE (VoLTE) and internet protocol multimedia subsystem (IMS). The current dynamics and outlook are favourable for our business.

Note
1 Before exceptional items.

The following drivers are the primary challenges in the service assurance segment and the emerging business opportunities for Spirent:

- Service providers are turning to analytics to reduce time and cost to resolve network and customer problems.
- Service providers face competition driving focus on customer experience to reduce customer churn.
- Service providers see benefits of network virtualisation but will take time to implement.

Service providers spend cautiously

Service provider spending remained cautious as the shift continued from legacy networks to virtualisation and how best to realise potential benefits. The growth in the complexity of networks and services, coupled with intense competition between service providers and the fear of customer churn, has led to greater emphasis on customer experience management and on the exploitation of big data analytics.

Analytics

Spirent sells analytics solutions primarily into the wireless segment, with a focus on network engineering groups at top-tier operators in North America and EMEA. Spending is shifting towards solutions that predict and avoid network service issues, calls to customer care, or customer churn.

Customer experience management

Additionally, operators are at different levels of maturity with respect to customer-centric operations and are facing different opportunities and challenges. Many operators are evolving from network-centric to customer-centric operations, and need to support new technologies, such as VoLTE, voice over Wi-Fi (VoWi-Fi), 5G, Internet of Things (IoT) and virtualisation.

Virtualisation

Based on feedback from our Tier-1 carrier customers and market data[1], we expect a gradual, targeted deployment of virtualisation in carrier networks, which began in 2015.

Mobile network and service rollout and evolution

LTE and VoLTE services are being rolled out by network operators and 5G services are on the horizon. We continue to develop innovative performance management and troubleshooting systems for these new services to reduce our customers' capex and opex costs and radically accelerate the time to launch new services, provision new subscribers and troubleshoot problems.

There are 165 operators investing in VoLTE-related activities, including 102 operators with commercially launched VoLTE HD service in 54 countries[2].

At Mobile World Congress 2016, Google announced an initiative with multiple Tier-1 operators and the GSMA to expedite the rollout of Rich Communication Services (RCS)[3]; with the launch of Wi-Fi calling services that seamless roam to LTE, carriers are now poised to offer a compelling package of voice and video telephony services that work seamlessly across mobile, home and business domains. We expect this announcement to accelerate the rollout of RCS, IR.94 video calling, VoLTE and Wi-Fi calling and create demand for evaluating the quality of experience of these complex new services.

Service providers will evolve from using Wi-Fi primarily to deliver data services to using Wi-Fi as the preferred approach to deliver all in-home services including high-quality video, data and voice services[4]. The Carrier-Wi-Fi market continues to grow rapidly with equipment revenues growing at 17 per cent year-on-year (2014-15) driven by fixed and mobile operator and ISP deployments[5]. Furthermore, there is increasing demand for solutions to monitor and manage Wi-Fi service level agreements between carriers and enterprises.

Adoption of active test solutions

To manage the network functions virtualisation (NFV) in a complex hybrid network and to manage new services, in particular, ones that traverse more than one network, network operators require active performance test systems for service turn-up and troubleshooting. Active test systems can be combined with analytics to measure network performance and customer experience periodically and to quickly isolate and diagnose detected or reported network performance and customer experience problems.

Strategy

Spirent's strategy focuses on radically reducing the time and cost to turn-up new services and to diagnose, troubleshoot and resolve issues with production networks.

Spirent and ADTRAN demonstrate the future of user-driven services

Spirent enables customer-centric, fully automated provisioning and assurance of Carrier Ethernet Services over SDN-controlled networks, which was demonstrated jointly with ADTRAN at the MEF16 Proof of Concept (PoC) Showcase. The Lumos Service Assurance Controller configures Virtual Test Functions for provisioning verification and SLA monitoring, controlling active TCP, IP and Ethernet tests and managing test result data.

"The approach to services creation and activation has changed. Service providers are transitioning to a user-driven service model allowing them to operate at web-scale. Open, programmable and scalable software-defined access (SD-Access) architectures integrated with innovative cloud-based applications such as Spirent's Service Assurance Controller, Lumos, allows service providers to support rapid service creation and delivery while significantly reducing the cost of subscriber acquisition and maintenance."

Robert Conger,
AVP of Cloud and Portfolio Strategy at ADTRAN

Spirent enables customers to radically reduce time to characterise network performance and to identify and resolve user experience problems through end-to-end visibility and real-time analytics.

Spirent develops new solutions that capitalise on the benefits that virtualisation enables. Enhancements to hand-held test tools reduce the need to dispatch technicians and enable problems to be resolved more quickly and effectively. This improves customer satisfaction and retention while reducing the cost and complexity of operating and managing the network.

Spirent will provide systems to enable IoT devices and applications to connect to the network seamlessly, reducing the time and cost of pre-deployment qualification, and using analytics to manage the on-boarding and scaling of IoT devices and applications on the network.

Spirent's strategy is to provide the leading active test assurance platform for hybrid networks by integrating physical and virtual test functions from multiple existing capabilities. Spirent's patented, active test technology provides unprecedented visibility of the customer's true service experience for complex IP services that flow across providers, domains and hybrid networks. Active test solutions provide a superior ability to isolate and resolve issues in virtualised network environments where traditional passive approaches are less effective. By bringing these capabilities together in the Lumos platform, we expect to win business at multiple Tier-1 carriers deploying software-defined networks and NFV and next-generation IP services.

The strategy can be summarised as follows:

- Develop a new active service assurance product (Lumos) for Ethernet business service and mobile network turn-up, active testing and troubleshooting.
- Expand the footprint of the customer and network analytics system (InTouch) in our current installed-base and in new service providers.
- Develop the new active service assurance solution (VisionWorks) for mobile networks, leveraging the mobile test tools (LandSlide) and analytics expertise and technology.
- Expand expertise and system capability to measure service quality and customer experience for services, like voice, video and data, and battery life over various networks and under different conditions (Umetrix).
- Enhance the hand-held test tool (FLEX) for emerging requirements for in-home applications and automating workflow routines.

Product development

Spirent invested in a broad portfolio of products and services to assure the whole service, covering the core, backhaul, home, mobility locations and devices from the physical to the service layers.

- Spirent delivered and installed virtual probes and 100G probes.
- The new service assurance platform (Lumos) which directly targets the carriers' need to automate assurance functions in hybrid physical-virtual networks was released.
- The first release was made of the new customer and network analytics product family (InTouch CNA), supporting sophisticated wireless control plane analytics. The first sale was fulfilled with the successful deployment into a large network in Mexico.
- There were major upgrades of our hand-held test tool (FLEX) enabling field technicians to verify the quality of in-home services over Wi-Fi with support for the 802.11ac standard.
- Umetrix for Voice Experience Verification was released. There were successful deployments of Umetrix High-definition Voice Servers in the core networks of Tier-1 operators in the US and China demonstrating its ability to isolate complex VoLTE and Wi-Fi calling issues by performing HD call and speech tests to the server.

Sources
1 IHS "Carrier SDN Strategies Service Provider Survey" (2016)
2 GSA (31 January 2017)
3 Google announcement at MWC 2016
4 IHS "Home Networking Devices" (2016)
5 IHS "Carrier Wi-Fi Equipment" (2016)

Scaling the mobile infrastructure

With the explosion in the number of connected devices, Spirent's customers are looking for a test solution to validate that their networks and devices can deliver a high quality of experience to end users across multiple services at scale.

In an evaluation of Nokia's Virtualised Mobile Gateway, Spirent demonstrated massive scale of 60 million devices and 120 million connections on a single blade server generating a real-world mix of voice, enterprise, safety, IoT and other services on a global scale.

ENABLING CARRIERS AND EQUIPMENT MANUFACTURERS TO VALIDATE MOBILE SERVICES...

...THAT DELIVER A HIGH QUALITY USER EXPERIENCE

> We are well positioned, new product launches, a focused R&D programme and further efficiency initiatives underway.

Paula Bell
Chief Financial Officer

Group financial performance

Group overview

The Group improved profit performance despite some predicted headwinds. The slowing of wireless device testing impacted revenue in the year, and a large one-off order for hand-held test tools which benefitted 2015 meant year-on-year revenue declined 4 per cent. Our largest business Networks & Applications, together with Positioning, delivered strong growth in the year. With an overall reduction in the cost base, adjusted operating profit increased 10 per cent to $46.5 million and adjusted operating margin improved to 10.2 per cent. The balance sheet remains strong with $96.1 million of cash and following a review of all lines of business we are well positioned to focus investments into fewer areas which are commensurate with the key market growth drivers.

The following table shows summary financial performance for the Group:

$ million	2016	2015
Revenue	**457.9**	477.1
Gross margin (%)	**70.8**	69.5
Adjusted operating profit[1]	**46.5**	42.1
Operating margin[2] (%)	**10.2**	8.8
Adjusted basic earnings per share[3] (cents)	**5.29**	5.00
Reported operating (loss)/profit	**(41.1)**	10.1
Basic (loss)/earnings per share (cents)	**(6.93)**	2.18
Closing cash	**96.1**	102.0

Notes

1 Before exceptional items, acquisition related costs, acquired intangible asset amortisation and impairment, goodwill impairment and share-based payment.

2 Adjusted operating profit as a percentage of revenue in the period.

3 Adjusted basic earnings per share is based on adjusted earnings as set out in note 12 of Notes to the full year consolidated financial statements.

Revenue

Group revenue reduced by 4 per cent to $457.9 million (2015 $477.1 million), with growth in Networks & Applications more than offset by the decline in wireless device test, reflected in Wireless & Positioning, and through the impact of the non-repeating contract for hand-held test tools delivered in 2015, reflected in Service Assurance. Networks & Applications, our largest business, grew revenue 6 per cent, predominantly driven by demand for Cloud and IP test solutions. Wireless & Positioning benefitted from strong growth in Positioning, although it was impacted by the decline in wireless device test. Within Service Assurance there was encouraging growth in our Customer Experience Management segment, although overall Service Assurance revenue decreased by 17 per cent reflecting the impact of the non-repeating contract for hand-held test tools delivered in 2015.

Geographically, the Americas remained our largest regional market at 55 per cent of total Group revenue. Revenue declined by 5 per cent in this region, impacted by the headwinds in wireless device test and the non-repeating hand-held test tool revenue in Service Assurance. These headwinds more than offset increased demand in Networks & Applications and US government orders in Positioning. Asia Pacific increased its share of Group revenue to 33 per cent from 31 per cent. Japan was a particular highlight in the Asia Pacific region, experiencing 26 per cent growth after a relatively weak 2015. EMEA at 12 per cent of total Group revenue experienced some weakness as a result of major customer consolidation and continued migration of research and development spend outside the region.

Gross margin

Gross margin increased to 70.8 per cent (2015 69.5 per cent) benefitting from a robust performance in the Positioning business and product mix.

Operating costs

$ million	2016	2015[1]
Product development	111.7	118.3
Selling and distribution	125.4	127.2
Administration	40.7	44.2
Total operating costs[2]	277.8	289.7
Networks & Applications	153.1	151.1
Wireless & Positioning	68.5	82.2
Service Assurance	48.7	50.6
Corporate	7.5	5.8
Total operating costs[2]	277.8	289.7

Notes
1 Restated for changes to the Group's operating segments effective 1 January 2016 as set out in note 4 of Notes to the full year consolidated financial statements.
2 Before other items.

Despite inflation, costs reduced by 4 per cent compared to 2015 as a result of the decisive action to right-size those parts of the business that operate in more challenging markets. The total Group investment in product development fell by $6.6 million, with investment levels maintained at Networks & Applications and Service Assurance but reduced by $6.2 million at Wireless & Positioning in response to the challenges in the wireless device test market.

Selling and distribution costs decreased by $1.8 million in 2016. A review of the sales organisation and cost structure was undertaken by external consultants in the second half of the year and as a consequence of this review cost reduction actions commenced at the end of 2016; the sales compensation structure is also being refreshed for 2017 onwards.

Administration costs reduced to $40.7 million in 2016, compared with $44.2 million in 2015, mainly due to the impact of cost reduction actions taken in 2015 and foreign exchange gains.

Corporate costs in 2015 were flattered by the release of $1.1 million of lease and environmental provisions.

The annualised cost savings resulting from the restructuring programme commenced in 2016 are expected to be in the order of $13 million.

Operating profit

$ million	2016	Adjusted operating margin[2] (%)	2015[1]	Adjusted operating margin[2] (%)
Networks & Applications	25.2	9.7	18.9	7.7
Wireless & Positioning	17.1	14.4	14.9	10.9
Service Assurance	11.7	14.6	14.1	14.7
Corporate	(7.5)		(5.8)	
Adjusted operating profit[2]	**46.5**	**10.2**	42.1	8.8
Exceptional items	(4.8)		(12.5)	
Acquisition related costs	–		(0.1)	
Acquired intangible asset amortisation and impairment	(20.6)		(14.8)	
Goodwill impairment	(61.4)		(3.8)	
Share-based payment	(0.8)		(0.8)	
Reported operating (loss)/profit	**(41.1)**		10.1	

Notes
1 Restated for changes to the Group's operating segments effective 1 January 2016 as set out in note 4 of Notes to the full year consolidated financial statements.
2 Before exceptional items, acquisition related costs, acquired intangible asset amortisation and impairment, goodwill impairment and share-based payment.

Adjusted operating profit increased by 10 per cent to $46.5 million, compared with $42.1 million in 2015, and adjusted operating margin increased to 10.2 per cent from 8.8 per cent in 2015. Responsible cost management and the effect of the cost reduction measures taken late in 2015 resulted in a net reduction in indirect costs of $11.9 million. Notwithstanding this reduction we have continued to invest in key growth areas.

Exceptional items and goodwill impairment

During the second half of 2016 the Company undertook a portfolio review with the objective of focusing Spirent's lines of business on those test technologies and services which will best drive sustainable earnings growth. In addition, external consultants were engaged to benchmark the sales and distribution organisation and a programme has been implemented to increase our effectiveness and efficiency in this area. These initiatives led to cost reduction actions at the end of 2016. As a result, $4.8 million of restructuring costs were incurred, predominantly severance, with a further $2 to $3 million in 2017 to conclude the programme.

The portfolio review has necessitated redistribution and refocus of existing resources and therefore decisions have been taken to reduce or cease investments in some areas. This has resulted in the decision not to invest further in the Developer Tools and Device Intelligence lines of business which constitute separate cash generating units for goodwill impairment review purposes. In addition, the change on 1 January 2017 to the reported operating segments has led to a change in the composition of cash generating units and a reassessment of value in use, which has exposed our Wireless line of business to an impairment. For goodwill impairment review purposes, the Wireless line of business forms part of the Connected Devices cash generating unit. Consequently, a total impairment of $69.1 million has been taken in respect of goodwill and acquired intangible assets in relation to the Developer Tools and Device Intelligence lines of business, and the Connected Devices cash generating unit.

Currency impact

The effect of fluctuating exchange rates is relatively minimal as the Group's revenue and costs are primarily denominated in US dollars or US dollar-linked currencies.

Finance income and costs

Finance income for 2016 was $0.3 million, compared to $0.4 million in 2015. Surplus funds are held principally in the United Kingdom and United States and earn market rates of interest which remain minimal. Finance costs of $0.7 million (2015 $0.5 million) comprised the interest cost on the defined benefit pension plan.

Share of result of associate

Spirent's share of the loss incurred by its associate, Jolata, Inc. (Jolata), was $1.9 million (2015 $0.4 million loss). In addition, the balance of our investment in Jolata at 31 December 2016 of $2.6 million has been impaired following a review of the outlook for this investment, resulting in a total charge to the income statement in respect of the associate of $4.5 million. The $2.6 million impairment charge is an adjusting item for the purposes of calculating adjusted profit before tax and adjusted earnings per share.

Tax

Taxable profits for the Group arise principally in the United States. Tax in the income statement for the Group in 2016 was a credit of $3.7 million (2015 $3.9 million credit). The current year effective tax rate was 26.9 per cent (2015 26.2 per cent) of adjusted pre-tax profit, excluding tax on adjusting items of $14.6 million (2015 $8.5 million) and a prior year tax credit of $1.0 million (2015 $6.3 million). At 31 December 2016 deferred tax assets amounting to $33.1 million (31 December 2015 $25.6 million) have been recognised on the balance sheet. At 31 December 2016 there are unrecognised deferred tax assets amounting to a tax value of $20.6 million (31 December 2015 $22.0 million).

For 2017 it is expected that the effective tax rate will continue to be in the region of 26 to 27 per cent.

Earnings per share

Adjusted basic earnings per share was up 6 per cent at 5.29 cents (2015 5.00 cents). There were 610.6 million (2015 610.5 million) weighted average shares in issue. Basic loss per share was 6.93 cents compared with earnings of 2.18 cents for 2015. See note 12 to Notes to the consolidated financial statements on page 118 for the calculation of earnings per share.

Treasury management

The key objective of the Group's treasury department is to manage the financial risks of the business and to ensure that sufficient liquidity is available to the Group. All treasury activity operates within a formal control framework. The Board has approved treasury policies and guidelines and periodically reviews treasury activities. Additionally, it is the Group's policy that speculative treasury transactions are expressly forbidden.

Spirent's financial risk management objectives and policies and its exposure to risks are discussed in note 27 of Notes to the consolidated financial statements.

Financing and cash flow

The Group continues to be cash generative and this gives Spirent the financial flexibility to invest in organic growth, pursue strategic acquisitions and pay sustainable dividends to shareholders.

Cash and cash equivalents were $96.1 million at 31 December 2016 compared with $102.0 million at 31 December 2015. There was no debt.

Cash generated from operations was lower in 2016 than 2015 at $47.4 million (2015 $57.8 million) impacted by the cash cost of the restructuring actions taken in late 2015 and 2016 of $8.4 million and an additional contribution to the defined benefit pension plan of $3.3 million made in July 2016. Free cash flow conversion represented 0.8 times adjusted earnings (2015 1.2 times).

Free cash flow is set out below:

$ million	2016	2015
Cash flow from operations	**47.4**	57.8
Tax (paid)/received	**(4.7)**	2.6
Net cash inflow from operating activities	**42.7**	60.4
Interest received	**0.3**	0.4
Net capital expenditure	**(17.1)**	(25.5)
Free cash flow	**25.9**	35.3

Net capital expenditure of $17.1 million was $8.4 million lower than in 2015 due to moves to new leasehold facilities, higher levels of spend on demonstration equipment and the implementation of a new IT system last year.

In 2016 the final dividend for 2015 and an interim dividend for 2016 totalling $24.2 million were paid (2015 $23.5 million). In addition, cash consideration on the exercise of the option to acquire the non-controlling interest in Spirent Technologies GmbH (formerly Testing Technologies) amounting to $2.6 million was paid in 2016.

Defined benefit pension plans

The Group operates two funded defined benefit pension plans in the United Kingdom, both of which were closed to new entrants some time ago.

The accounting valuation of these plans at the end of 2016 showed a net deficit of $12.8 million compared with a net deficit of $19.1 million at 31 December 2015. The deficit has reduced because of contributions paid in the year and asset returns from market growth in excess of the increase in liabilities due to a reduction in the discount rate. In addition, movements in the US dollar to sterling exchange rate impact the deficit expressed in US dollars. The accounting valuation is based on the full year results of the actuarial valuation dated 1 April 2015.

The Group has also reported a liability of $0.7 million (31 December 2015 $0.7 million) in respect of United Kingdom unfunded plan liabilities.

The Company and the Trustees have reached an agreement in relation to the funding of the pension plans following the Triennial Valuation in 2015. The technical deficit on 31 March 2015 was $46.0 million which will be funded over a seven-year period, commencing 1 July 2016, by an annual contribution of $6.2 million (£5.0 million).

Dividend

The Board is recommending the payment of a final dividend for 2016 of 2.21 cents (1.80 pence) per share which, together with the interim dividend of 1.68 cents (1.27 pence) per share paid in September 2016, brings the full year dividend to 3.89 cents (3.07 pence) per share. The dividend is covered 1.4 times by adjusted earnings. This maintains the full year dividend for 2016 at the same level as for 2015 at 3.89 cents per share. In sterling terms this represents an increase of 15 per cent.

Subject to approval by shareholders at the Annual General Meeting on 3 May 2017, the final dividend will be paid on 5 May 2017 to shareholders on the register at 10 March 2017. Payment to ADR holders will be made on 15 May 2017.

Restatement of operating segments

Full year 2015 operating segment information has been restated for the following changes to the Group's operating segments which came into effect on 1 January 2016:

- The Service Experience line of business was combined with the core Service Assurance line of business and reclassified from Wireless & Service Experience to Service Assurance. As a result of this change the Wireless & Service Experience operating segment was renamed Wireless & Positioning. The enlarged Service Assurance operating segment, which now includes the Service Experience line of business, continues to be named Service Assurance.
- The Spirent Technologies GmbH (formerly Testing Technologies) line of business was incorporated into the Networks & Applications operating segment and reclassified from Wireless & Service Experience to Networks & Applications.

Following a review of products and service offerings to best address market growth opportunities a more fundamental change to the Group's operating segments came into effect from 1 January 2017. Going forward the Group will be reorganised into three new operating segments as follows:

- Networks & Security – which will consist of the Cloud IP, Application Security and Positioning lines of business.
- Lifecycle Service Assurance – which will consist of the Mobility Infrastructure, Customer Experience Management, Service Assurance and Automation Platform Technologies lines of business.
- Connected Devices – which will consist of the Wireless and Service Experience lines of business together with Communications Technologies Management (formerly Device Intelligence and Developer Tools).

See the Chief Executive Officer's Strategic Review for an explanation of how the lines of business have been remapped from the current to the new operating segments.

We believe our approach to managing sustainability issues will drive business performance.

FuturePositive: Our sustainability approach

Our sustainability programme is called FuturePositive. Its objectives are to help our customers create the technologies needed to secure a sustainable future and ensure we embed the highest standards of environmental management, social practices and corporate governance in our business and supply chain.

Through this programme we look to create long-term value by:

- developing innovative test solutions needed to develop new communications technologies to address global sustainability challenges;
- building better relationships with our stakeholders and improving our understanding of their needs and expectations;
- enhancing our operational efficiency;
- creating a safe, fair and supportive work environment;
- attracting and retaining talent and nurturing engineering skills and interest in young people;
- reducing the whole-life environmental impact of our products;
- protecting our reputation and ability to grow; and
- assessing and managing risks and opportunities from significant sustainability issues.

Our material sustainability issues

In 2016, we reviewed the sustainability issues that are material to Spirent using the AccountAbility (“AA”) 1000 standard. The revised analysis reaffirmed the importance of anti-corruption and business ethics policies for the business and identified the importance of our product functionality in unlocking sustainable performance for our customers.

Policies

Spirent is governed by our responsible business policies. The policies commit the Group to compliance with high standards of ethics and business integrity, environmental management and employee and community welfare.

Material issues

Governance

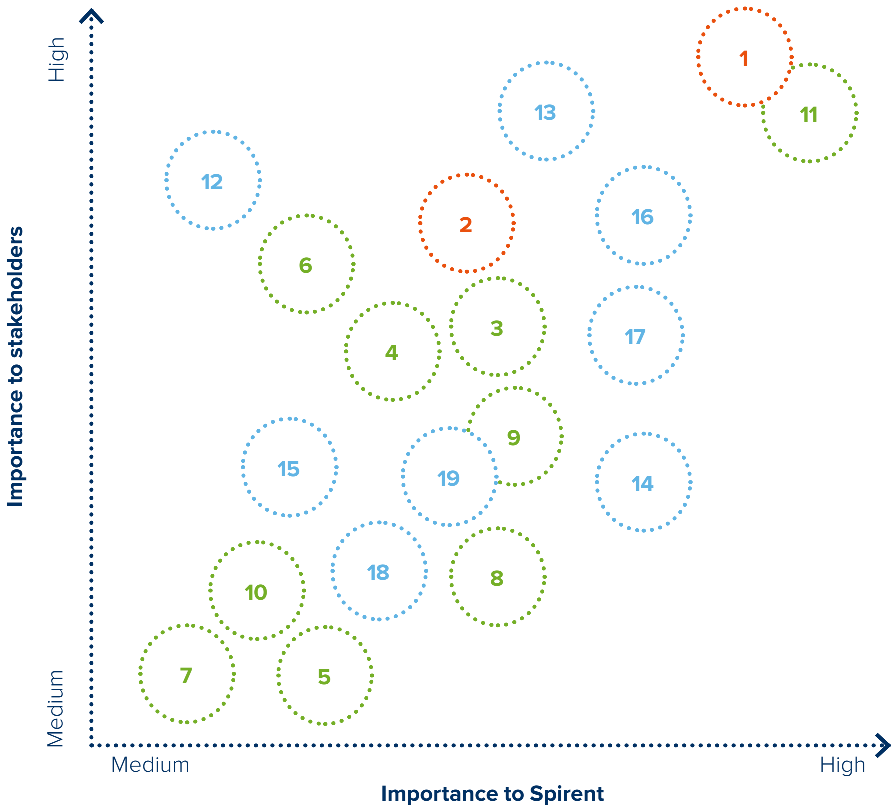
1. Corruption and business ethics
2. Disclosure and reporting

Environmental

3. Resource and energy efficiency
4. Product design for the environment
5. Environmental management
6. Greenhouse gas emissions and climate change
7. Waste
8. Hazardous materials (REACH, RoHS)
9. Environmental impacts of supply chain and distribution
10. Impacts and product end-of-life
11. Sustainability impact through product functionality

Social

12. Customer privacy and data security
13. Human and labour rights
14. Diversity and equality
15. Conflict materials
16. Skills development
17. Health and safety
18. Supporting local communities
19. Social impacts of supply chain distribution



The Sustainability Policy provides the Group's overarching approach to the management of all sustainability issues and is supported by issue-specific policies for Business Ethics and Human Rights, Data Protection and Environmental Management.

The Group is also committed to compliance with all applicable regulation in each of the jurisdictions in which it operates, having policies in place to deal with environmental, health and safety, labour practices and fair business practices.

Further details of our policies are available on our website at http://corporate.spirent.com

Progress in 2016

Reporting: Continued Improvement

In 2016 we committed to further improve our sustainability reporting quality and transparency. To achieve this, we expanded the range of sustainability metrics in our Sustainability Report and worked to improve our data collection processes.

Sustainability in our products

We implemented the revised product development process guidelines at our Positioning division which includes a suite of product sustainability requirements and metrics. Our new product, the GSS 7000, was developed following the process guidelines and has improved on its predecessor in all metrics (for more details see page 46). Across our businesses, we began active engagement with our customers to better understand their sustainability goals and how Spirent products can help to achieve them.

Procurement processes and documentation

The majority of the environmental impacts related to Spirent's activities occur in our supply chain as almost all Spirent products are produced by third-party contract manufacturers and component suppliers. In 2016, we enhanced our supplier sustainability assessment and audit processes, introducing a new supplier code of conduct, a revised vendor assessment questionnaire and an

Supporting STEM opportunities through our Paignton, UK site

Spirent is at the forefront of emerging technologies and Science, Technology, Engineering and Mathematics (STEM) skills are critical to the success of our business. However, recruiting people with the right technical skills for our business in the local area has become increasingly difficult.

To ensure long-term viability in the region, it is essential to engage with young people and educational institutions to encourage interest in STEM subjects and develop world-leading technology courses. We must also develop innovative approaches to attract talented people to join and stay with Spirent.

Targets

Our initial project target was to find and hire local talent, however it soon became apparent that the regional educational structure was falling short in delivering the skills required by employers. Our scope broadened to encouraging interest in STEM subjects and helping to improve course design at all educational levels.

Our approach

To encourage interest in STEM subjects, we have partnered with regional organisations and educational institutions to provide young people with world-leading training and work experience in the southwest of the UK, where our Positioning unit is located.

Furthermore, through student placements and apprenticeships we have helped reduce the financial burden of education and improved access to technology jobs.

It is critical to show young people that not only are STEM subjects fun, but they can also be the foundation of rewarding careers. By encouraging connections between young people, educators and employers, we seek to ensure our future here and support sustainable economic development for the region.

Key issues facing STEM industries

- Lack of awareness and encouragement in STEM skills and careers
- Barriers to technology training and work experience
- Lack of STEM-related roles for young people

expanded supplier audit programme. In 2016 we conducted six audits on suppliers representing 39 per cent of our direct supply chain spend.

Our programmes

Our FuturePositive programme has four main focus areas: Product, People, Property and Procurement. Full details of our programmes are set out in our 2016 Sustainability Report at http://corporate.spirent.com.

Product

Electronic waste and use of hazardous materials

The Group's business units comply with the EU's Waste Electrical and Electronic Equipment Regulations 2013 and Batteries Directive and the California Electronic Waste Recycling Programme.

Although Spirent's hardware products are classified as Category Nine (Monitor and Control Equipment) and are currently outside the scope of the EU's Restriction of Hazardous Substances Directive ("RoHS"), new products are designed to comply and measures are in place to ensure the Group's hardware products will comply when they are brought into scope in June 2017.

Conflict minerals

The Group is not directly required to comply with or report under Section 1502 of the Dodd-Frank Act, the US Conflict Minerals Law. However, it has robust procedures in place to ensure that it would be in compliance if it were brought within the scope of this legislation. The Group will be subject to the EU Directive on Conflict Minerals when it is enacted into UK legislation. We are monitoring these developments and are confident our existing practices will meet the standards required.

People

Business ethics and human rights

The Group's core values and principles and the standards of behaviour to which every employee across the Group is expected to work, are set out in the Group's Ethics Policy. These values and principles are applied to all dealings with our customers, suppliers and other stakeholders.

The Group has a zero-tolerance approach to all forms of bribery and corruption. As a UK company, Spirent Communications plc is bound by the laws of the UK, including the Bribery Act 2010, in respect of our conduct both at home and abroad.

In addition, we will uphold all laws relating to countering bribery and corruption, as well as human rights, in all jurisdictions in which we operate.

Equality and diversity

The Group employs a diverse workforce and prides itself on providing equal opportunities for all. High value is placed on rewarding our people for their commitment, their integrity and their service. We aim to ensure that no employee is discriminated against, directly or indirectly, on the grounds of colour, race, ethnic or national origins, sexual orientation or gender, marital status, disability, religion or belief, being part-time or on the grounds of age.

These practices are governed by our Ethics Policy and HR policies.

At 31 October 2016, Spirent employed 1,598 employees of whom 344 were female (21.5 per cent) and 1,254 were male (78.5 per cent). 22 of the Group's senior management were female (12.6 per cent) and 152 male (87.4 per cent), with two female members of the Board (22.2 per cent) and seven male (77.8 per cent).

The Board is aware of the Gender Pay Gap reporting regulations that will come into effect in the UK during 2017 and will report as required in due course.

Health and Safety

The Board has designated the Chief Financial Officer as being responsible for health and safety performance within the Group and procedures are in place for incidents to be reported through the Audit Committee to the Board as necessary.

The health and safety risk profile for the Group remained low during 2016, with no reportable accidents.

Training and skills

Spirent provides all employees with a wide range of technical and business training opportunities. We manage training through personal development plans which are assessed by all managers and updated periodically and form a key part of our annual performance review process.

Higher education and schools

Through knowledge-transfer partnerships, we continue to promote STEM skills and innovation among young students in their early career development (for more details see page 43). Our work in this area has been recognised by being short-listed for the Business In The Community 'Inspiring Young Talent' Award for 2016.

STEM initiatives and community impact projects

Spirent actively encourages its employees to become STEM ambassadors around the globe. Our ambassadors work with students in local schools and institutions to help them develop STEM skills and help them in their professional journey.

We also provide our employees with volunteering time off to make a positive contribution to the communities in which we work.

Property

Energy use

Energy use is an important environmental impact for Spirent. Our property, including engineering and development labs, are key energy-using processes within the scope of our direct operations.

Energy use in 2016 decreased by 4.4 per cent from 16,781 MWh to 16,044 MWh. This reduction was the result of the Group's efforts to refurbish, retrofit and implement higher building-sustainability standards across the estate. Energy use at the San Jose site in California was 54 per cent lower in 2016 when compared to the business unit's previous, less energy-efficient, site in Sunnyvale, helped by concerted efforts to implement more efficient energy management systems in our labs at the site.

Greenhouse gas emissions

Greenhouse gas ("GHG") emissions are a material issue for Spirent and we are committed to reporting emissions and acting to combat climate change. The Group once again reported to the Carbon Disclosure Project ("CDP") in 2016, completing the Climate Change and Supply Chain questionnaire.

In 2016 we improved our CDP performance band to A-, achieving a year-on-year improvement for the past four reporting periods:

Year	Programme	Disclosure Score	Performance Band
2016	Climate Change 2016	N/A	A-
2015	Climate Change 2015	95	C
2014	Climate Change 2014	73	D
2013	Climate Change (Investor CDP)	66	D

Emissions from:	**2016 Tonnes of CO_2e**	2015 Tonnes of CO_2e
Combustion of fuel and operation of facilities (scope 1)	**139.3**	256.1
Electricity, heat, steam and cooling purchased for own use (scope 2)	**6,486.7**	6,747.1
Total emissions	**6,626.1**	7,003.2

Emissions intensity measurement:		
Normalised to per square metre of gross internal area of our facilities	0.146	0.154
Normalised to per $m of revenue	14.47	14.68

Methodology

Reporting on emission sources is required under the Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013 and these sources fall within our consolidated financial statements. We have reported on all the emission sources that fall within our consolidated financial statements. We are not responsible for any emission sources that are not included in our consolidated financial statements. We have used the GHG Protocol Corporate Accounting and Reporting Standard (Revised Edition), with data gathered to fulfil our requirements under these Regulations, and emission factors from the UK Government's GHG Conversion Factors for Company Reporting 2016 for all countries except the United States, where US Environment Protection ("EPA") 2016 eGrid emissions factors for individual states were used.

GHG emissions for 2016 have been assured using the AA 1000 AS (2008) standard. The assurance statement can be found in our 2016 Sustainability Report at http://corporate.spirent.com.

Performance against target

The Group set a target to reduce carbon emissions by 5 per cent relative to revenue from 2015 figures. We have not achieved this target.

We have made good progress in reducing our carbon footprint and in 2016 we reduced our absolute emissions by 5.4 per cent from the previous year and 12 of our 37 sites have achieved absolute reductions in GHG emissions of 5 per cent or more. Primarily these reductions have been driven by our estate rationalisation programme and a focus on energy management in our engineering labs.

Emissions per $m of revenues decreased by only 1.4 per cent as revenue was lower in 2016.

Compliance

The Group is not required to comply with the UK Energy Savings Opportunity Scheme ("ESOS") Regulations 2014.

Procurement

The majority of the environmental impacts occur in our supply chain as almost all production of Spirent products is undertaken by third-party contract manufacturers and component suppliers.

As such, the sustainability performance of suppliers is carefully assessed through vendor questionnaires and on-site audits.

Compliance

We comply with the requirements of the UK Modern Slavery Act 2015 and the California Transparency in Supply Chains Act 2010. We require slavery and human trafficking to be eradicated from our direct supply chain for the products we sell.

Vendor assessment and auditing

Our code of conduct sets out our expectations of our vendors in the areas of environmental management, labour and human rights, health and safety and business ethics.

Vendors are assessed using a detailed questionnaire which was significantly revised in 2016 to include enhanced disclosures of environmental, social and business ethics management.

Priority suppliers are audited by Spirent's compliance team. Six supplier audits were conducted in 2016 at contract manufacturers and component suppliers, representing 39 per cent of our direct supply chain spend. No material issues were identified.

We also make use of industry-body audit programmes to determine the compliance status of our suppliers.

Pages 1 to 46 form part of the Strategic Report.

By order of the Board
Angus Iveson
Company Secretary & General Counsel
2 March 2017

Increasing efficiency across products: GSS 7000

Spirent supplies a market-leading range of Global Navigation Satellite System ("GNSS") simulators for research and development, integration, verification and product testing.

The GSS 7000 provides an easy-to-use but powerful solution for GNSS testing which can grow with users' evolving needs. With sustainability performance embedded into the product development process, there has been sustained improvement in the GSS range both in terms of performance and efficiency. The GSS 7000 is the latest iteration of this design process and benefits from reduced material and energy use.

The GSS 7000 is 57 per cent lighter, 53 per cent smaller, with a 69 per cent reduction in ambient standby power compared to its predecessor, the GSS 9000 system.

	GSS 8000	GSS 9000	GSS 7000
Hardware	4 x GSS 8000 2 x rack 1 x controller and accessories 1 x MCU 40 x channel banks	1 x GSS 9000 1 x controller and accessories 10 x channel banks	1 x GSS 7000 4 x channel banks 1 x GSS 7000 4 x channel banks
Weight (kg)	30	28	12
Ambient Standby Power (W)	299	494	154
Size HxWxD (mm)	266 x 450 x 533	175 x 455 x 620	176.95 x 235.2 x 555

Efficiency

With its energy-efficient embedded host and signal generator, the GSS 7000 is significantly more efficient than both the GSS 8000 and GSS 9000 systems. The GSS 7000 consumes only 22% of the power of a GSS 9000.

Scalability

The GSS 7000 provides an entry to multi-frequency testing. A modular approach was integrated into the design process to enable this system to expand with the users' needs, extending the operational life of the hardware.

Flexibility

Software, constellations and options can be added to the GSS 7000 via easy, affordable in-field upgrades, reducing the down time for users as their needs grow and reducing associated upgrade freight emissions.

CHAIRMAN'S INTRODUCTION TO GOVERNANCE

Dear Shareholder

I shall be stepping down as Chairman at the conclusion of the AGM in May this year, after serving over ten years on the Board of Spirent, seven of them as Chairman. The search for my replacement as Chairman, led by our Senior Independent Director, Jonathan Silver, is well underway and we look forward to updating you in due course.

During my time on the Board, I have seen a great deal of change in the corporate governance landscape and a significant increase in legislation and regulation. Despite these many changes, I believe the core role of the Board has remained largely the same, to ensure that the Board has effective tools and information to challenge, encourage and measure the performance of the management team while not unduly hampering their entrepreneurial instinct.

We are assisted in achieving our core role by operating a robust governance framework which fits the requirements of Spirent's business. The Corporate Governance section of this Annual Report explains our approach in more detail. The Board seeks to demonstrate good practice in the way we discharge our responsibilities and through our Chief Executive Officer and Chief Financial Officer seek to ensure that good corporate behaviours are instilled across the Group. The Board seeks to demonstrate through our actions that accountability, integrity and respect are the cornerstones for a healthy business. During the course of each year the Board interacts with a good cross section of our business unit leaders and I am pleased to see that the behaviours we practice are being modelled across the business.

I am pleased to see the progress we are making as a business in the area of sustainability and would encourage you to read the separate Sustainability Report on our website. This report describes in detail the progress we are making in all areas of sustainability, with particular highlights in enhancing energy efficiency for Spirent and for our customers and in encouraging the development of Science, Technology, Engineering and Mathematics ("STEM") skills in the communities where we operate.

We have been fortunate to welcome significant new talent to our Board during the past year and, as I step down, I believe there is in place a strong group of non-executive directors with the right mix of skills and experience to assist Spirent in meeting the coming opportunities and challenges that it will face.

I look forward to meeting those shareholders attending our AGM in May.

Alex Walker
Chairman
2 March 2017

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Alex Walker
Chairman
Alex joined the Board in December 2006 and was appointed Chairman of the Company in March 2010. He chairs the Nomination Committee attending other Committee meetings by invitation, but will be stepping down from the Board at the conclusion of the 2017 AGM.

Until August 2006 Alex was Chief Executive of Yule Catto & Co. plc, until April 2010 he was a non-executive director of Rotork plc and until May 2014 he was a non-executive director of Zotefoams plc.

2

Eric Hutchinson
Chief Executive Officer
Eric was appointed to the Board in January 2000 as Chief Financial Officer and appointed Chief Executive Officer in September 2013.

Eric joined the Company in 1983 and worked in various roles in the finance function prior to his appointment as Chief Financial Officer.

He is a Fellow of the Association of Chartered Certified Accountants and a member of the Financial Reporting Review Panel.

3

Paula Bell
Chief Financial Officer
Paula was appointed to the Board in September 2016 as Chief Financial Officer.

From 2013, Paula was Chief Financial Officer at John Menzies plc, following seven years as Group Finance Director of Ricardo plc and has extensive strategic financial and commercial experience from large listed global companies, BAA Plc, AWG Plc and Rolls Royce Plc.

Since 2012, Paula has been a non-executive director of Laird plc and is Chairman of their Audit Committee.

Paula is a Fellow of the Chartered Institute of Management Accountants and a Chartered Global Management Accountant.

4

Gary Bullard
Independent Non-Executive Director
Gary was appointed to the Board in December 2016. He is a member of the Audit, Nomination and Remuneration Committees and will be Chairman of the Remuneration Committee following the 2017 AGM.

Gary is a non-executive director at Rotork plc, where he is Chair of their Remuneration Committee and a member of their Audit and Nomination Committees. He previously held senior management positions, including sales and marketing roles, at IBM and BT Group plc and was a non-executive director of Chloride Group plc. He most recently held the position of President at Logica UK until October 2012 and was a member of the Executive Committee of Logica plc.

5

Tom Lantzsch
Independent Non-Executive Director
Tom was appointed to the Board in May 2015. He is a member of the Audit, Nomination and Remuneration Committees, but will be stepping down from the Board on 3 March 2017.

In January 2017, Tom joined Intel Corporation as Senior Vice President and General Manager of their Internet of Things (IoT) Group. Prior to this, he was Executive Vice President Strategy at ARM Holdings for ten years, holding a variety of senior leadership roles in technology industries over the last 30 years.

6

Tom Maxwell
Independent Non-Executive Director
Tom was appointed to the Board in October 2007. He is currently Chairman of the Remuneration Committee and a member of the Audit and Nomination Committees, but will be stepping down from the Board at the conclusion of the 2017 AGM.

Until September 2007, Tom was Investment Director and Head of the UK Growth & Income Product Group at Martin Currie Investment Management in Edinburgh.

He is a Member of the Chartered Institute of Bankers in Scotland and a Member of the Society of Investment Professionals and the CFA Institute.

Tom is a non-executive director of Foresight 3 VCT plc.

7

Jonathan Silver
Senior Independent Non-Executive Director
Jonathan was appointed to the Board in June 2015. He is Chairman of the Audit Committee, a member of the Nomination and Remuneration Committees and was appointed Senior Independent Director in November 2016.

Jonathan stepped down from his role as Chief Financial Officer at Laird plc in 2015 where he held a variety of senior positions over the last 30 years. Since 2007 he has also been a non-executive director at Invesco Income Growth Trust plc, where he is also Chair of their Audit Committee.

8

Sue Swenson
Independent Non-Executive Director
Sue was appointed to the Board in February 2012. She is a member of the Audit, Nomination and Remuneration Committees and was Senior Independent Director between August 2015 and November 2016.

Sue is CEO and Chairman of Novatel Wireless, Inc., and a non-executive director of Wells Fargo and Harmonic, Inc. Sue has also been appointed by the US National Telecommunications and Information Administration as a founding board member of the First Responder Network Authority.

9

Bill Thomas
Independent Non-Executive Director
Bill was appointed to the Board in December 2016. He is a member of the Audit, Nomination and Remuneration Committees.

Bill is a former Senior Vice President at Hewlett Packard and was on the executive committee of EDS plc as Executive Vice President. He has IT expertise and is an experienced leader and general manager with a track record in leading major change in large organisations.

Bill is a member of the Council and President of the Alumni Association at Cranfield University School of Management and is on the management and Board of Leeds University Business School. He also serves as Chair of the Royal Navy and Royal Marines Charity, is a non-executive director of The Co-operative Bank and serves on the Advisory Board of FireEye, Inc.

Compliance with the UK Corporate Governance Code

As a premium listed company on the London Stock Exchange, the Company is reporting in accordance with the UK Corporate Governance Code (the "Code") published in September 2014 which sets out standards of good practice in relation to board leadership and effectiveness, remuneration, accountability and relations with shareholders. The Code is published by the UK Financial Reporting Council ("FRC") and a copy of the Code is available from the FRC website at www.frc.org.uk.

The Board confirms that the Company has complied in full with the Code throughout the period under review.

The Board acknowledges that revisions were made to the Code in April 2016 and, in line with reporting requirements, will report to shareholders on the Company's compliance with the revised code in next year's Annual Report.

Leadership

The Board

The Board of Directors is collectively responsible to the Company's shareholders for the direction and oversight of the Company to ensure its long-term success.

The Board met regularly throughout the year to approve the Group's strategic objectives, to lead the Group within a framework of effective controls which enable risk to be assessed and managed and to ensure that sufficient resources are available to meet the objectives set.

There are a number of matters which are specifically reserved for the Board's approval. These are set out in a clearly defined schedule which includes: matters relating to the Group's strategic plan; approving the annual business strategy and objectives; the nature and extent of principal risks to be taken to achieve the strategic objectives; changes relating to structure and capital; approval of trading statements, half year results, final results and annual report and accounts; declaring interim dividends and recommending final dividends; the Group's policies and systems of internal control and risk management, approving capital projects, acquisitions and disposals valued at over $2 million; and provision of adequate succession planning.

The schedule of matters reserved for the Board was reviewed during the year and approved and adopted at the February 2016 Board meeting.

Certain specific responsibilities are delegated to the committees of the Board, notably the Audit, Nomination and Remuneration Committees, which operate within clearly defined terms of reference and report regularly to the Board. For further details, please see the reports of each Committee that follow this statement.

Chairman and Chief Executive Officer

The roles of the Chairman and the Chief Executive Officer are separately held and the division of their responsibilities is clearly established, set out in writing, and agreed by the Board to ensure that no one person has unfettered powers of decision. The Chairman is responsible for the operation and leadership of the Board, ensuring its effectiveness and setting its agenda. The Chief Executive Officer is responsible for leading and managing the Group's business within a set of authorities delegated by the Board and the implementation of Board strategy and policy.

Authority for the operational management of the Group's business has been delegated to the Chief Executive Officer for execution or further delegation by him for the effective day-to-day running and management of the Group. The Group Executive Committee, led by the Chief Executive Officer, consists of Chief Financial Officer, Chief Operating Officer, EVP Global Sales, EVP Strategic Marketing and the Company Secretary & General Counsel.

Senior Independent Director

The role of Senior Independent Director is to act as a sounding board for the Chairman and to serve as an intermediary for other directors as necessary. He is also available to shareholders to convey concerns to the Board which they have been unable to convey through the Chairman or through the executive directors. During the year, led by the Senior Independent Director, the non-executive directors have met without the presence of the Chairman (including to appraise the Chairman's performance). In order to facilitate the search for a new Chairman, US-based Sue Swenson stepped down from the role of Senior Independent Director on 2 November 2016 and has been replaced in the role by Jonathan Silver, who is based in the UK.

Non-executive Directors

In addition to their responsibilities for strategy and business results, the non-executive directors play a key role in providing a solid foundation for good corporate governance and ensure that no individual or group dominates the Board's decision making. They each occupy, or have occupied, senior positions in industry, bringing valuable external perspective to the Board's deliberations through their experience and insight from other sectors enabling them to contribute significantly to Board decision-making. The formal letters of appointment of the non-executive directors are available for inspection at the Company's registered office.

Board Committees

The Board has established three principal Board committees, to which it has delegated certain of its responsibilities. These are the Audit Committee, the Nomination Committee and the Remuneration Committee. The membership, responsibilities and activities of these committees are described later in this corporate governance statement and, in the case of the Remuneration Committee, in the Report on directors' remuneration beginning on page 64. Membership of these committees is reviewed annually and minutes of committee meetings are made available to all directors on a timely basis.

The chairmen of the Audit, Nomination and Remuneration Committees intend to be present at the Annual General Meeting to answer questions on the work of their respective committees.

The written terms of reference for the Audit, Nomination and Remuneration Committees, all of which were reviewed, updated and approved during the year, are available on the Company's website at http://corporate.spirent.com.

Election and re-election of Directors

In accordance with the Code's recommendations, all directors who wish to continue in their roles will be proposed for election or re-election at the 2017 Annual General Meeting to be held in May. Tom Lantzsch, Tom Maxwell and Alex Walker, as previously announced, will not seek re-election.

The Board confirms that each of the directors standing for re-election has been subject to a formal performance evaluation in relation to their duty to act in the long-term interests of the Company, while also having regard to other stakeholders.

Governance framework

Board
Non-executive Chairman
Two executive directors
Six independent non-executive directors

Audit Committee
Six independent non-executive directors
Provides oversight and governance over the Group's financial reporting, internal controls, risk management and relationship with external auditor
Committee report pages 58 to 63

Nomination Committee
Non-executive Chairman
Six independent non-executive directors
Primary responsibility for succession planning, director selection and Board composition
Committee report page 57

Remuneration Committee
Six independent non-executive directors
Agrees remuneration policy and sets individual compensation levels for executive directors and senior management
Committee report pages 64 to 83

Executive Directors
Chief Executive Officer
Chief Financial Officer

Group Executive Committee
Chief Executive Officer
Chief Financial Officer
Chief Operating Officer
EVP, Global Sales
EVP, Strategic Marketing
Company Secretary & General Counsel

Company Secretary

In his role of Company Secretary and General Counsel, Angus Iveson is responsible for advising and supporting the Chairman and the Board on corporate governance matters as well as ensuring that there is a smooth flow of information to enable effective decision making. All directors have access to the advice and services of the Company Secretary and can take independent professional advice in respect of their duties, at the Company's expense.

Board meetings

The Board held nine meetings during the year, including a two-day strategy meeting held at the Company's site in San Jose, California.

Senior executives below Board level are invited, when appropriate, to attend Board meetings and to make presentations relating to the results and strategies of their business units and Group-wide responsibilities. Papers for Board and Committee meetings are provided to directors in advance of the meeting.

The attendance of the directors at Board and Committee meetings during the year under review is shown in the table below. Where a director was unable to participate in a meeting either in person or remotely, the Chairman solicited their views on key terms of business in advance of the relevant meeting, so that that these could be shared with the meeting and contribute to the debate.

Directors' indemnity provisions

In accordance with its Articles of Association, the Company has granted a qualifying third party indemnity, to the extent permitted by law, to each director. The Company also maintains directors' and officers' liability insurance.

These provisions are qualifying third party indemnity provisions as defined in section 234 of the Companies Act 2006. Neither the Company's indemnity nor the insurance provides cover in the event that a director is proven to have acted dishonestly or fraudulently.

Board activities during 2016

At each Board meeting, the Chief Executive Officer presents an update on the performance, strategy and business issues across the Group and the Chief Financial Officer presents a detailed analysis of the financial performance of the business units. Senior executives below Board level attend relevant parts of Board meetings in order to make presentations on their areas of responsibility; this gives the Board access to a broader group of executives and helps the directors make ongoing assessments of the Group's succession plans. The Board has a rolling programme of visits to business unit locations to deepen its appreciation of the different opportunities and challenges that each unit faces.

	Board	Audit Committee	Nomination Committee	Remuneration Committee
Alex Walker	9/9	–	4/4	–
Paula Bell[1]	3/3	–	–	–
Eric Hutchinson	9/9	–	–	–
Rachel Whiting[2]	3/3	–	–	–
Gary Bullard[3]	1/1	0/0	0/0	1/1
Tom Lantzsch	9/9	4/4	4/4	7/7
Duncan Lewis[4]	0/1	0/1	0/1	0/1
Tom Maxwell	9/9	4/4	4/4	7/7
Jonathan Silver	9/9	4/4	4/4	7/7
Sue Swenson	9/9	4/4	4/4	7/7
Bill Thomas[5]	1/1	0/0	0/0	1/1

Notes
1 Paula Bell was appointed to the Board on 5 September 2016.
2 Rachel Whiting stepped down from the Board on 4 May 2016.
3 Gary Bullard was appointed to the Board on 1 December 2016.
4 Duncan Lewis died on 15 March 2016.
5 Bill Thomas was appointed to the Board on 1 December 2016.

Key Board activities during 2016

Governance and risk

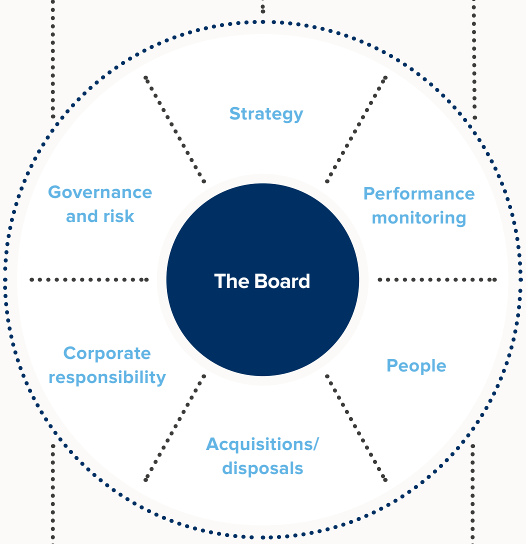
- Review and approval of full year and half year results announcements and presentations and trading updates and Annual Report 2015 in particular to ensure statements are fair, balanced and understandable
- Oversight and approval of viability statement processes
- Assessment and approval of continuing dividend policy
- Consideration of Audit Committee review of internal controls and risk management
- Review and appraisal of the Board's performance
- Review of schedule of matters reserved to the Board and Committee terms of reference
- Consideration of regular regulatory updates
- Review of external governance reports on Annual Report 2015 in preparation for the 2016 AGM and subsequent discussion of voting patterns and issues arising from that meeting

Strategy

- Review and analysis of communications test and measurement market
- Review of business portfolio
- Review of reorganisation of business segments
- Review of updates on corporate strategy and acquisitions

Performance monitoring

- Receipt of regular reports from the Chief Executive Officer
- Receipt of senior management presentations from each of the Group business lines
- Review and approval of budget for 2017
- Analysis of feedback on directors' meetings with institutional investors
- Review of reports from the Chairmen of Board Committees
- Examination of Company's investment management policy
- Review and approval of impairment assessment
- Evaluation of Group insurance coverage
- Discussions on Company's capital policy
- Review of actions arising from Board evaluation



Corporate responsibility

- Approval of disclosures required by Modern Slavery Act 2015
- Receipt of regular updates on health, safety and environmental issues reported by the Audit Committee
- Preparation for compliance with Market Abuse Regulation and other new regulations

Acquisitions/disposals

- Review of acquisition proposals

People

- Appointment of Paula Bell as Chief Financial Officer
- Appointments of Gary Bullard and Bill Thomas as independent non-executive directors
- Review of independent status of continuing and new non-executive directors
- Revision of policy for identification of Persons Discharging Management Responsibility
- Consideration of Board level and senior succession planning and resource activities

Effectiveness

Board composition

At the date of this Report, the Board comprises a non-executive Chairman, six independent non-executive directors and two executive directors.

The Chairman and the non-executive directors contribute entrepreneurial leadership and external expertise and experience in areas of importance to the Company, such as strategic investments, corporate finance, general finance and corporate governance. They also contribute independent challenge and rigour to the Board's deliberations and assist in the development of the Company's strategy, scrutiny of the performance of management in meeting agreed goals and targets, and satisfying themselves of the integrity of the Company's internal controls and risk management systems. The Board believes that all of the directors devote sufficient time and attention as is necessary in order to perform their duties.

The Chairman holds regular discussions with the non-executive directors without the executive directors present to ensure a free and frank exchange of views on the effectiveness of the executive directors and senior management.

Independence

The independence of each non-executive director is reviewed on appointment and at least annually. The Board determined that the current non-executive directors are each independent in character and judgement, save for the Chairman who was deemed independent by the Board at the date of his appointment. None have been employed by the Company previously in any capacity or have any material business relationship with any Group company.

Non-executive directors at Spirent receive no remuneration from the Company other than their fees (detailed in the Report on directors' remuneration on page 69) and each non-executive director has confirmed that they do not represent any significant shareholder in the Company.

No individual or group of individuals dominates the Board's decision making and the Code requirement stating that at least half of the Board (excluding the Chairman) should comprise independent non-executive directors is satisfied.

Appointments to the Board

There is a formal, rigorous and transparent procedure for the appointment of new directors to the Board. Details are available in the Nomination Committee report on page 57 which also provides details of the Committee's role and activities.

Board performance evaluation

An evaluation to assess the performance of the Board as a whole, its committees and that of the individual directors is conducted annually.

In accordance with the Code requirement that the evaluation should be conducted by an external facilitator at least every three years, in 2015 Useful Thinking Limited ("UTL") was engaged to undertake a review of the Board and its Committees. UTL is independent, with no other connection with the Company. During the final quarter of 2016, an internally-led review took place.

Process

Following a scoping exercise with the Chairman and the Company Secretary to agree the priority areas and issues to be addressed in the review, the directors completed an online questionnaire, centring on themes including the strengths and values of the Board, the quality of succession planning, the interaction of the Board members with the Group's various business units, the process of managing strategic planning and the management of risk.

During the year, the implementation of a number of recommended action points arising from the 2016 evaluation was overseen by the Chairman and included the following actions:

2016 actions

- Prioritisation of resources on market segments which provide greatest growth opportunities;
- Provision of increased visibility on the progress of the most significant product development and acquisition investments;
- Focus on Board succession in light of non-executive director and Chairman tenure and further assess senior leadership bench strength

Based on the outcome of the 2016 review, it was concluded that the Board continues to work very effectively as a cohesive body with a good balance of support, challenge and mutual trust between the executive and non-executive directors.

It was also the Board's view that, overall, the principal committees continued to function efficiently and effectively. Each of the directors was considered to be making a valuable contribution and with proper commitment, including of time, to their respective roles.

A list of action points arising from the 2016 review on how the Board can become even more effective was discussed and agreed by the Board. These action points form a Board development plan to be implemented under the direction of the Chairman and include the following actions:

2017 Objectives

- More clearly articulate Spirent's strategic vision;
- Strengthen knowledge of emerging sectors in order to better understand allocation of research and development resources;
- Review appropriateness of KPIs;
- Assess senior leadership depth in more detail;
- Review existing internal control procedures in the light of the recent appointment of a new Chief Financial Officer.

Commitment

The letters of appointment for the Chairman and non-executive directors set out the expected time commitment required of them and are available for inspection at the Company's registered office and at the Annual General Meeting. Other significant commitments of the Chairman and non-executive directors are disclosed on appointment and require approval thereafter.

Board development

On appointment, directors are offered an induction programme on the operations and activities of the Group, the role of the Board and the matters reserved to its decision, the Group's corporate governance practices and procedures and their duties, responsibilities and obligations as directors of a listed public limited company. This is supplemented by visits to key locations and meetings with and presentations by senior executives.

Further training for directors is available as required and can be provided by means of external courses, internal computer-based training, briefings from specific consultants or in-house presentations. In addition, directors' knowledge of the legal and regulatory environment is updated through the provision of information by the Group's advisers and by means of regular updates from the Company Secretary.

New directors are encouraged to take advantage of opportunities to meet with major shareholders and attend presentations to analysts where possible.

Information flow

The Company Secretary manages the provision of information to the Board at appropriate times in consultation with the Chairman and Chief Executive Officer. In addition to formal meetings, the Chairman and Chief Executive Officer maintain regular contact with all directors. The Chairman also holds informal meetings with non-executive directors, without any of the executives being present, to discuss any issues affecting the Group, if this is thought necessary. Regular management updates are sent to directors to keep the non- executive directors informed of events throughout the Group between Board meetings and to ensure that they are kept fully advised of the latest issues affecting the Group.

Conflicts of interest procedures

The Company has procedures in place, which were reviewed and updated during the year, to deal with the situation where a director has a conflict of interest. As part of this process, the Board:

- considers each potential conflict situation separately on its particular facts;
- considers the potential conflict situation in conjunction with the rest of the directors' duties under the Companies Act 2006;
- keeps records and Board minutes as to authorisations granted by directors and the scope of any approvals given; and
- regularly reviews conflict authorisation.

Accountability

Financial and business reporting

The Board recognises its responsibility to present a fair, balanced and understandable assessment of Spirent in all of its reporting obligations. This responsibility covers the Annual Report and extends to the half year report and other regulatory announcements. The Directors consider this Annual Report, taken as a whole, to be fair, balanced and understandable, providing the information necessary for shareholders to assess the Company's performance, business model and strategy. In arriving at this position, the Board asked the Audit Committee to review and confirm a process is in place to support this assessment. The Audit Committee confirmed that a robust approach is in place to support the fair, balanced and understandable assessment, details of which can be found in the Audit Committee's report on pages 58 to 63.

Business model

A description of the Company's business model for sustainable growth is set out in "Our business model and strategy" on pages 6 and 7. This section provides an explanation of the basis on which the Group generates value and preserves it over the long-term and its strategy for delivering its objectives.

Going concern

After making enquiries, the directors have a reasonable expectation that the Company and the Group have adequate resources to continue in operational existence for the foreseeable future. Accordingly, and consistent with the guidance contained in the document titled 'Guidance on Risk Management, Internal Control and Related Financial and Business Reporting' published by the FRC, they continue to adopt the going concern basis in preparing the annual financial statements.

Internal control and risk management

The Board acknowledges its responsibilities for the Group's system of internal control to facilitate the identification, assessment and management of risk, the protection of shareholders' investments and the Group's assets. The directors recognise that they are responsible for providing a return to shareholders which is consistent with the responsible assessment and mitigation of risks.

Effective controls ensure that the Group's exposure to avoidable risk is minimised, that adequate accounting records are maintained, that the financial information used within the business is reliable and that the consolidated accounts preparation and financial reporting processes comply with all relevant regulatory reporting requirements. The dynamics of the Group and the environment within which it operates are continually evolving, together with its exposure to risk. Internal controls can only provide reasonable and not absolute assurance against material misstatement or loss.

The directors confirm that there is an ongoing, robust process for identifying, evaluating and managing the principal risks faced by the Group and the operational effectiveness of the related controls, which has been in place for the year under review and up to the date of approval of the annual report and accounts. They also confirm that they have regularly reviewed the system of risk management and internal controls utilising the review process set out below.

The directors confirm that a robust assessment of the principal risks facing the Company has been carried out, including those risks that would threaten its business model, future performance, solvency or liquidity. More details are set out in the Principal risks and uncertainties on pages 24 and 25 of this Annual Report.

Standards
There are guidelines on the minimum Group-wide requirements for health and safety and environmental standards. There are also guidelines on the minimum level of internal control that each of the business units should exercise over specified processes. Each business has developed and documented policies and procedures to comply with the minimum control standards established, including procedures for monitoring compliance and taking corrective action. The management of each business is required to confirm twice yearly that it has complied with these policies and procedures.

High level controls
All businesses prepare annual operating plans and budgets which are supplemented by regular forecasts throughout the year. Performance against budget is monitored at operational level and centrally, with variances being reported promptly. The cash position at Group and operational level is monitored constantly and variances from expected levels are investigated thoroughly.

Clearly defined guidelines have been established for capital expenditure and investment decisions. These include the preparation of budgets, appraisal and review procedures, and delegated authority levels.

Financial reporting
Detailed management accounts are prepared every month, consolidated in a single system and reviewed by senior management and the Board. They include a comprehensive set of financial reports and key performance indicators covering commercial and operational issues. Performance against budgets and forecasts is discussed regularly at Board meetings and at meetings between operational and Group management. The adequacy and suitability of key performance indicators is reviewed regularly.

Internal audit
All of the internal audit activities are co-ordinated centrally by an identified senior member of the Group finance team, who is accountable to the Audit Committee.

All Group businesses are required to comply with the Group's financial control framework that sets out minimum control standards. A key function of the Group's internal audit resource is to undertake audits to ensure compliance with the financial control framework and make recommendations for improvement in controls where appropriate.

Senior members of the Group finance team meet with the Chairman of the Audit Committee as appropriate but at least annually, without the presence of executive management, and have direct access to the Chairman.

Remuneration
The Directors' report on remuneration is set out on pages 64 to 83 and provides details of our remuneration policy and how it has been implemented, together with the activities of the Remuneration Committee.

Articles of Association and share capital
Information in relation to share capital, the appointment and powers of directors and the issue and buy back of shares and significant interests in share capital is set out in the Directors' report on pages 84 to 87.

Relations with shareholders
The Board is committed to maintaining good communications with shareholders. The Chairman, Chief Executive Officer and Chief Financial Officer have regular face to face contact with individual institutional shareholders in order to develop an understanding of their views which are then discussed with the Board. All directors are offered the opportunity to develop a dialogue with major shareholders to listen to their views and executive directors receive regular reports prepared by an independent capital markets advisory firm which provides comprehensive information relating to the Company's major shareholders.

Presentations are made to analysts, investors and prospective investors covering the full year and half year results and the Company seeks to maintain a dialogue with the various bodies which monitor the Company's governance policies and procedures.

The Company is always keen to hear the views of its private shareholders and we encourage them to access our website at http://corporate.spirent.com/ for our Company reports and business information and to use our shareholder mailbox at investor.relations@spirent.com for detailed enquiries.

Any concerns raised by shareholders or their representatives, whether expressed directly or through voting patterns at the Company's AGM, are discussed by the directors and an appropriate response given either specifically to the concerned party or, if it is felt to be of wider benefit, made available to all shareholders via the Company's website.

Annual General Meeting
The Company's 2017 Annual General Meeting ("2017 AGM") will be held at 10.30am on 3 May 2017 at the offices of Spirent Communications at Aspen Way, Paignton, Devon TQ4 7QR.

The Board views the AGM as a valuable opportunity to communicate with private shareholders in particular, for whom it provides the opportunity to hear about the general development of the business and to ask questions of the Chairman and, through him, the chairmen of the key Committees and other directors.

The Board looks forward to welcoming all our shareholders to our 2017 AGM and to updating them on our business developments.

Members

During the year and at the date of this report:

- Alex Walker (Chairman)
- Gary Bullard (appointed 1 December 2016)
- Tom Lantzsch
- Duncan Lewis (until his death in March 2016)
- Tom Maxwell
- Jonathan Silver
- Sue Swenson
- Bill Thomas (appointed 1 December 2016)

Key duties

In accordance with its terms of reference, the Nomination Committee's key duties include:

- leading the search process and making recommendations to the Board for the appointment of new directors;
- regularly reviewing the Board structure, size and composition (including the skills, knowledge, independence, experience and diversity), recommending any necessary changes and considering plans for orderly succession; and
- making recommendations to the Board about suitable candidates for the role of Senior Independent Director, and membership of the Audit and Remuneration Committees in consultation with the chairmen of the relevant Committees.

How the Committee operates

Members of the Nomination Committee are appointed by the Board from the directors of the Company. The Committee comprises a minimum of three independent non-executive directors. A quorum consists of two members being either two independent non-executive directors or one independent non-executive director and the Chairman.

Only members of the Committee have the right to attend Committee meetings. Other individuals such as the Chief Executive Officer and external advisers may be invited to attend meetings when appropriate.

When dealing with the appointment of the Chairman, the Committee is chaired by the Senior Independent Director.

The terms of reference of the Nomination Committee, which were updated and approved during the year, are available on the Company's website at http://corporate.spirent.com.

Meetings

The Nomination Committee met four times during the year under review.

Committee activities during 2016:

Board appointments process

The Chairman leads the process for new appointments with external, independent consultants engaged to conduct a search for potential candidates. These are considered on the basis of their skills, experience and fit with the existing members of the Board. Procedures for appointing a non-executive or an executive director are set out in the Committee's terms of reference.

Appointment of new Executive Director

Following the announcement in November 2015 of Rachel Whiting's intention to retire from the Board prior to the 2016 AGM, a search for a replacement was initiated.

The services of external executive search firm Odgers Berndtson were retained to assist with the process. Odgers Berndtson is independent, with no other connection to the Company and is a signatory to the "Voluntary Code of Conduct for Executive Search Firms" on gender diversity and best practice.

Following a rigorous process of interviews and assessments, and on the recommendation of the Nomination Committee, the Board approved the appointment of Paula Bell as Chief Financial Officer with effect from 5 September 2016.

Appointment of new Independent Non-executive Directors

During the year, the Chairman led the process for the appointment of two new independent non-executive directors as part of the progressive refreshing of the Board.

The services of external executive consulting firm JCA Group ("JCA") were retained to identify candidates. JCA is independent, with no other connection to the Company, and is a signatory to the "Voluntary Code of Conduct for Executive Search Firms" on gender diversity and best practice.

Following a rigorous process of interviews and assessments and, on the recommendation of the Nomination Committee, the Board approved the appointments of Gary Bullard and Bill Thomas with effect from 1 December 2016.

Appointment of new Chairman

Following the announcement in November 2016 of Alex Walker's intention to retire as both Chairman and Non-executive Director at the conclusion of the 2017 AGM, the Senior Independent Director was asked by the Committee to initiate a search for a replacement.

The services of external executive search firm Spencer Stuart were retained to assist with the process. Spencer Stuart is independent, with no other connection to the Company and is a signatory to the "Voluntary Code of Conduct for Executive Search Firms" on gender diversity and best practice. The Company will report on progress in due course.

Diversity policy at Board level

The Board recognises that diversity is key for introducing different perspectives into board debate and decision making. It continues to be the Board's policy to make new appointments based on merit, recognising that gender remains an important aspect of the overall diversity which is crucial to creating an optimal board in terms of balance and composition.

A genuinely diverse board comprises individuals with a range of personal attributes, perspectives, skills, experience and backgrounds, as well as representing differences in nationality, race, gender and candidates for board appointments are considered from the widest possible pool.

Performance review

The performance of the Committee was evaluated as part of the annual Board performance evaluation and the Committee was found to be operating effectively.

Re-election of Directors

The Committee reviews the results of the annual Board performance evaluation that specifically relate to the composition of the Board and whether the time commitment of those who fulfil the roles of Chairman, Senior Independent Director and non-executive director was appropriate. The Committee was particularly mindful of the independence of longer-serving members of the Board.

The Committee was satisfied that all non-executive members of the Board devote sufficient time to their duties and remain independent in nature and recommend all continuing directors for re-election by shareholders at the forthcoming AGM.

Dear Shareholder

2016 has seen many changes to the Audit Committee and Spirent's finance team. Rachel Whiting stepped down from the Board in May and retired from the Company in September. Paula Bell was appointed in September as our new Chief Financial Officer. The Committee has also welcomed new members, Gary Bullard and Bill Thomas, in December, adding their extensive experience to our activities.

The change in senior management personnel has offered an opportunity to review the internal control environment, with an emphasis on continuing to bring strength to the already robust financial processes within the organisation. The Committee continues to challenge and develop the scope of Spirent's internal audit review programme as the organisational structure evolves and changes. The Committee receives regular updates throughout the year on any changes in the financial controls environment and also received assurances from external professional advisers.

The Committee also reviews and discusses with the external auditor the scope of their audit to ensure that it responds to risk appropriately.

As you will have seen in the Financial Review on pages 38 to 41, following a detailed portfolio review by management, changes have been made to the segmental structure of the Group. The new operating segments will assist stakeholders in having a clearer view of the Group's business performance and the Committee is supportive of the new structure.

Also as a result of the portfolio review, and following discussions with the Committee and the Board, a review of goodwill and acquired intangible assets has been undertaken which reassessed the carrying value of the Company's investment. Following this review it has been necessary to take an impairment charge of $69.1 million, as more fully explained on page 40 of this Annual Report.

I will be available at the 2017 AGM to respond to any questions that shareholders may have on this report or on the Committee's activities.

Jonathan Silver
Chairman, Audit Committee
2 March 2017

Fair, balanced, understandable

In making its recommendation to the Board that the Annual Report, taken as a whole, is fair, balanced and understandable, the Committee applied robust governance arrangements, including:

- clear guidance and instruction of the disclosure requirement provided to contributors;
- comprehensive Group and subsidiary accounts processes, with written confirmations provided by business unit management teams on the health of the financial control environment;
- a verification process applied to factual content with the aim of providing the information necessary to assess the Company's performance, business model and strategy;
- reviews of the Annual Report undertaken at different levels of the Group and by the senior management team that aim to ensure consistency and overall balance;
- additional scrutiny by senior management including focused review of risk registers;
- additional Committee reviews of the draft Annual Report in advance of final sign-off; and
- external audit review.

Final approval of the Annual Report is provided by the Board, on the recommendation of the Committee.

Members

During the year and at the date of this report, Committee members were:

- Jonathan Silver (Committee Chairman)
- Gary Bullard (appointed 1 December 2016)
- Tom Lantzsch
- Duncan Lewis (until his death in March 2016)
- Tom Maxwell
- Sue Swenson
- Bill Thomas (appointed 1 December 2016)

The Audit Committee comprises a minimum of three members, all of whom are independent non-executive directors of the Company who have the necessary range of financial and commercial expertise to challenge management. Two members constitute a quorum. The membership of the Audit Committee has changed over the last few months, with both Gary Bullard and Bill Thomas appointed as members of the Committee on 1 December 2016.

The Code requires the inclusion of one financially qualified member (as recognised by the Consultative Committee of Accountancy Bodies) with recent and relevant financial experience. Currently, the Committee Chairman fulfils this requirement.

Key duties

In accordance with its terms of reference, the Audit Committee's key duties include:

- monitoring the integrity of the Group's financial statements and any formal announcements relating to the Company's performance, reviewing significant financial reporting judgements contained in them before their submission to the Board for approval;
- on matters of financial reporting reviewing and challenging where necessary the consistency of and any changes to accounting and treasury policies; for example whether the Group has followed appropriate accounting policies and made appropriate estimates and judgements, the clarity and completeness of disclosure, significant adjustments resulting from the audit, and the going concern assumption and compliance with auditing standards;
- at the request of the Board, reviewing the content of the Annual Report and Accounts and advising the Board on whether, taken as a whole, it is fair, balanced and understandable and provides the information necessary for shareholders to assess the Company's position and performance, business model and strategy;
- where requested by the Board, assisting in relation to the Board's assessment of the principal risks facing the Company and the prospects of the Company for the purposes of disclosures required in the Annual Report and Accounts;
- reviewing the effectiveness of the Group's internal financial controls, including the policies and overall process for assessing established systems of internal financial control and timeliness and the effectiveness of corrective action taken by management;
- reviewing the most appropriate fulfilment of the internal audit function, agreeing and assessing the annual internal audit plan and its effectiveness in the context of the Company's overall risk management system;
- overseeing the Group's policies, procedures and controls for preventing bribery, identifying money laundering, and the Group's arrangements for whistleblowing; and
- overseeing the relationship with the Group's external auditors, reporting to the Board each year whether it considers the audit contract should be put out to tender taking into account any legal requirements for tendering or rotation of the audit contract, reviewing and monitoring their objectivity and independence including seeking information from the external auditor on an annual basis about its policies and procedures for maintaining independence, agreeing the scope of their work and fees paid to them for audit, assessing the effectiveness of the audit process, and agreeing the policy in relation to the provision of non-audit services.

How the Committee operates

All Committee members are expected to be financially literate and to have an understanding of the following areas:

- the principles of, and developments in, financial reporting including applicable accounting standards and statements of recommended practice;
- key aspects of the Company's operations including corporate policies and the Group's internal control environment;
- matters which may influence the presentation of accounts and key figures;
- the principles of, and developments in, company law, sector-specific laws and other relevant corporate legislation;
- the role of internal and external auditing and risk management; and
- the regulatory framework for the Group's businesses.

The Committee invites the Chief Executive Officer, Chief Financial Officer and senior representatives of the external auditors to attend its meetings in full, although it reserves the right to request any of these individuals to withdraw.

During the year, the Committee held two meetings with the external auditors without any executive members of the Board being present.

The Committee has unrestricted access to Company documents and information, as well as to employees of the Company and the external auditors.

The Committee's effectiveness is reviewed on an annual basis as part of the Board's performance evaluation process.

The terms of reference of the Audit Committee were reviewed and updated during the year and can be viewed on the Company's website at http://corporate.spirent.com.

Meetings

The Audit Committee met four times during the year, with the Committee agenda linked to events in the Group's financial calendar.

Activities during 2016

The Audit Committee's activities principally related to financial reporting, internal control and risk management, the preparation for publishing a viability statement and the external audit. In addition, the Audit Committee considered other specific matters such as the Group's approach to IT controls and cyber security.

Financial reporting and significant issues

During the year, the Audit Committee:

- reviewed the full year and half year financial statements, trading updates, key accounting policies and significant financial reporting judgements contained therein (with particular reference to the critical accounting assumptions and judgements as set out in note 2 of the consolidated financial statements) and recommended the financial statements to the Board for approval;
- reviewed whether the Annual Report taken as a whole is fair, balanced and understandable and formed an opinion thereon prior to recommending it to the Board;
- reviewed and considered assumptions in relation to the going concern basis for preparation of financial statements; and
- reviewed the external auditor's report on the interim review and year end audit and management's responses to the issues raised.

The Committee Chairman reports any significant findings or identified weaknesses to the Board.

Significant financial issues considered

The Audit Committee has reviewed each of the following key significant financial risks by:

- reviewing papers and management updates;
- holding discussions with management and key finance staff to challenge assumptions made;
- debating alternative treatments;
- receiving periodic reports on key areas of judgement;
- discussing with external auditor; and
- considering presentations to analysts to assess for inconsistencies or areas of bias.

Revenue recognition

The Committee is aware that the potential complexity of accounting, as well as the pressure on management to meet certain targets, may result in inappropriate recognition of revenue and associated balances. Further training has continued from the programme introduced in 2015 with a refreshed programme of awareness-raising rolled out across the business units. The Committee has also been briefed on the finance organisation's implementation plan for adoption of the new revenue recognition standard (IFRS 15), which will apply to the Company's financial statements for the period beginning 1 January 2018.

As part of their audit procedures agreed with the Committee, Ernst & Young LLP ("EY") would examine the allocation of revenue and review specific large and complex transactions and contracts containing non-standard acceptance clauses to ensure that revenue has been recognised appropriately.

Deferred tax assets

The Committee recognises there is a risk that the recognition of deferred tax assets is dependent on the reliability of forecast revenue of the Group.

The Committee noted that EY has performed a detailed review of the recognition of deferred tax assets in the Group accounts as part of their audit review.

Goodwill impairment

Following a fundamental review of the lines of business by management to focus on key areas for sustainable growth, changes were introduced to the Group's operating segments which resulted in a reorganisation of the cash generating units for goodwill impairment purposes and some reallocations of goodwill to the new cash generating units. Management performed an impairment review and recommended to the Committee that a $69.1 million charge be made against goodwill and acquired intangible assets to reflect the reorganisation of our reporting segments, the intended reduction of investment in certain business units, the changing outlook for certain areas of the business, the reassessment of value in use and a more competitive landscape. The Committee challenged the assumptions made and concluded that management's assessment of goodwill is appropriate.

As part of it's audit process, EY undertook a review of the procedures followed and judgements made by management and agreed that management's conclusions related to the impairments were reasonable.

Restructuring costs

Following the review of the business, a new organisation structure is in place for 2017 and as a result, restructuring costs relating to these changes have been incurred, The Committee recognises that it is important that restructuring costs arising from decisions taken in December 2016 are properly accounted for and the Committee is satisfied that this has been done appropriately.

The Committee noted that EY was satisfied with the results of the procedures followed.

Misstatements

Management reported to the Committee that they were not aware of any material or immaterial misstatements made intentionally to achieve a particular outcome. The auditor reported to the Committee that all misstatements they had found in the course of their work had been corrected. After due consideration, the Committee concurred with management that no adjustments were required.

Internal control and risk management

During the year, the Audit Committee:

- monitored and reviewed internal control and risk management systems;
- reviewed and approved the internal audit programme for 2016; and
- reviewed regular reports on taxation, treasury operations, health and safety and cyber security.

The Board has overall responsibility for the Group's system of internal control and risk management and for reviewing its effectiveness. The Board, assisted by the Audit Committee, has reviewed the effectiveness of this system and this review did not reveal any significant issues or weaknesses. The Board confirms that this system of financial, operational and compliance controls and risk management was in place throughout the year under review and up to the date of approval of this Report. However, the change in senior management personnel has offered an opportunity to review the internal control environment, with an emphasis on continuing to bring strength to the already robust financial processes within the organisation.

The primary aim of the Group's internal controls is to operate a system which is appropriate to the business and which can support the Group in delivering its strategic objectives, safeguard the Group's assets and, over time, enhance shareholder value. The system is designed to identify, evaluate and manage the significant risks faced by the Group rather than to eliminate the risk of failure to achieve business objectives and can only provide reasonable and not absolute assurance against material misstatement or loss. This is in accordance with the Guidance on Risk Management, Internal Control and Related Financial and Business Reporting issued by the Financial Reporting Council in September 2014. Although in previous years the Committee did not consider it necessary to have a dedicated internal audit and risk management function, the increasingly global nature of the business and complex regulatory environment highlights this as an area for review by the Committee during 2017.

The Chief Financial Officer is responsible for internal control and for ensuring that the finance department employs a level of management and specialists appropriate for maintaining financial records and processes that provide financial information that is relevant, reliable, complies with applicable laws and regulations, and is distributed both internally and externally in a timely manner. A review of the consolidation and financial statements is undertaken by senior management to ensure that the financial position and results of the Group are appropriately reflected. All financial information published by the Group is subject to the approval of the Audit Committee prior to it being approved by the Board.

Risk Management
An individual has been identified as responsible for monitoring each principal risk or uncertainty.

Members of the Group Executive Committee meet with each business unit periodically to challenge and debate the assessment of risk within each business unit, who then submit local risk registers for analysis and ranking together with Company-wide risks to form a robust corporate risk register. This corporate risk register is then presented to the Audit Committee three times each year. Actions arising from the Audit Committee's review of the corporate risk register can then be fed back to the business units for their management.

Committee Oversight
Day-to-day responsibility for effective internal control and risk management and monitoring rests with senior management at business unit level. During the year, the Chief Financial Officer has attended all Audit Committee meetings to report on internal control and risk management and to notify the Committee of any control weaknesses, control failings and risks, their impact and the actions taken to deal with the issues. Detailed updates on specific areas, such as cyber security or business continuity, are provided by the Chief Financial Officer at the Committee's request.

The Board and Audit Committee consider that having the following key elements in place is critical to underpinning the overall internal control environment:

Operating structure and controls
An organisational structure with clear operating procedures, defined lines of responsibility and delegated levels of authority.

Financial control structure
A comprehensive strategic planning, financial control and budgeting system which is properly documented and regularly reviewed.

Ethics policy
A policy that sets standards of professionalism and integrity for all employees and operations. The Ethics Policy includes sections relating to bribery and corruption to ensure that all of Spirent's systems, controls and training comply with the anti-bribery and corruption legislation in the countries in which we operate and that a culture of prevention and detection of all forms of bribery and corruption is in place.

Acquisitions and divestments
A disciplined due diligence process and post-acquisition integration programme.

Whistleblowing and fraud
The Group's "whistleblowing" policy, which forms part of the Ethics Policy, contains arrangements for confidential reporting. The Audit Committee reviews any reports and the actions arising therefrom.

The Group's Ethics Policy has been communicated to all employees and states that all employees have a responsibility for fraud prevention and detection. Any suspicion of fraud should be reported immediately and investigated vigorously.

External audit
The Committee is responsible for overseeing the Company's relations with the external auditor.

The Committee places great importance on ensuring that high standards of quality and effectiveness are maintained within the external audit process. It considers a number of areas in relation to the external auditor: their performance in discharging the audit and interim review of financial statements, their independence and objectivity, and their re-appointment and remuneration.

Auditor appointment
Each year the Committee assesses and reports to the Board on the qualification, expertise and resources, and independence of the external auditor and the effectiveness of the audit process, with a recommendation on whether to propose to the shareholders that the external auditor be re-appointed.

The Committee notes and confirms compliance with the Competition and Markets Authority Order 2014 ("CMA Order") in respect of statutory audit services for large companies.

EY, or its predecessor firms, have acted as the Company's auditor since its incorporation and the Committee remains aware that the transitional provisions of the CMA Order and the EU Audit Regulations (which became effective on 17 June 2016) will require the Company to change its external auditor no later than 2021. After consideration, the Committee has concluded that, in the light of the appointment of a new Committee Chairman in 2015 and the appointment of a new Chief Financial Officer and rotation of a new Audit Partner in 2016, it is preferable for operational reasons to recommend the re-appointment of the incumbent external auditor at the 2017 AGM.

The Committee continues to affirm that 2017 would not be an appropriate time to begin a tender process for a new external auditor. The Committee further affirms that its current intention is to change the external auditor no later than the expiry of the five-year term of the external audit partner (ie by 2021) and that on that basis, a competitive tender process will commence for the new auditor's term to begin in 2021.

The Committee will continue to monitor legislative developments and will continue to review its conclusions on an annual basis.

There are no contractual obligations in existence that restrict the Company's choice of auditor.

Auditor effectiveness

The Committee assesses the effectiveness of the audit process on an ongoing basis, with particular attention to the mindset and culture, skills, character and knowledge, quality control and judgement of the external auditor in their handling of key judgements, responsiveness to the Committee and in their commentary where appropriate on the systems of internal control.

The Committee holds regular private meetings with the external auditor to assist with their assessment, including discussion of:

- how the auditor has identified and addressed potential risks to audit quality;
- the controls in place within the audit firm to identify risks to audit quality, including the results of internal and external inspections of the audit team and firm;
- whether the auditor has met the agreed audit plan, in particular how it has responded to any changes that have been required during the process;
- feedback from the key people involved in the audit;
- the content of the auditor's management letter.

The Committee reviewed and appropriately challenged the basis for these before agreeing the proposed approach and scope of the external audit identified.

As part of the review, the external auditor was questioned and challenged by the Committee about the work undertaken, its findings and what key assumptions had been made during the audit, especially with regard to the key areas of audit risk identified.

Auditor independence

The Committee assesses the independence and objectivity of the external auditor annually, taking into consideration relevant UK law, regulation, the FRC Revised Ethical Standard and other professional requirements. EY has provided a letter confirming its belief that it remained independent throughout 2016 and has discussed with the Committee the threats to its independence and the safeguards applied to mitigate those threats.

As part of this review, the Committee examined in particular:

- changes in the external audit partner and staff for the current year;
- a report from the external auditor describing its arrangements to identify, report and manage any conflicts of interest; and
- the extent of non-audit services provided by the external auditor.

Policy on non-audit services

The Committee is responsible for approving non-audit services, with the objective of ensuring that the provision of such services by the external auditor does not impair their independence or objectivity. Taking into account relevant ethical guidance, the Committee's policy precludes a number of non-audit services, including those relating to the accounting records and financial statements, internal audit, IT consulting, legal and investment services and other services deemed by regulators to be precluded. The Committee accepts that certain work of a non-audit nature may be best undertaken by the external auditor. The policy is reviewed and financial limits for the provision of non-audit services, including audit-related fees and other fees, are set on an annual basis (2016 $0.6 million (2015 $0.6 million)). In accordance with the Revised Ethical Standard issued by the FRC in June 2016, the lead audit engagement partner is required to notify the Audit Committee Chairman in advance for pre-approval of any proposed non-audit services.

The Committee considers that notwithstanding the non-audit services provided during the year totalling $0.1 million (2015 $0.1 million), and, taken as a whole and having regard to the views of the external auditor and management, the relationships do not appear to impair the auditor's independence and objectivity.

In response to the introduction of further measures under the EU Audit Reform Directive, the Committee reviewed its policy regarding the provision of non-audit services during the year. Tax-related services previously provided by the external auditor were re-tendered and, as a result of that process, these services will now be provided by Deloitte LLP ("Deloitte"). The Committee is satisfied that Deloitte is independent, thoughtful and challenging; fees paid to Deloitte during the period totalled $0.1 million (2015 nil) based on time and materials.

Dear Shareholder,
As Chairman of the Remuneration Committee (the "Committee"), I am pleased to present our Remuneration Report for the year ended 31 December 2016. This Report has been prepared on behalf of the Board by the Committee and has been approved by the Board.

In 2016, the Committee focused on:

- seeking shareholder approval for our revised Remuneration Policy at the 2016 AGM;
- implementing our new share incentive plan, the Spirent Long-Term Incentive Plan, following its approval by shareholders at the 2016 AGM;
- reviewing performance metrics for our annual cash incentives and share incentives to better align them with Company strategy.

The Committee was also called on to review and approve the remuneration package of the Company's new Chief Financial Officer, Paula Bell to ensure consistency with the current shareholder-approved Remuneration Policy.

Remuneration Policy
The Committee was delighted to receive strong shareholder support for its revised Remuneration Policy at the 2016 AGM, with 96.7% voting in favour of the resolution. The revised Policy became effective on 5 May 2016 and provides a strong framework for the Committee.

Long-Term Share Incentives
Also at the 2016 AGM, the Committee was pleased to receive strong shareholder approval for the introduction of the new Spirent Long-Term Incentive Plan, with 97.29% of votes cast in favour. This has enabled the Committee to move forward with the granting of awards to executive directors with challenging performance conditions.

Performance Metrics
The Committee has reviewed the metrics attached to the annual cash incentive for executive directors and the cash incentives for executives and senior managers, seeking to align the incentives to Company strategy in a more meaningful and transparent way. The amended metrics, which include a non-financial indicator, will apply to cash incentives for 2017 and are explained on page 66; they demonstrate the Committee's commitment to ensuring that maximum payouts remain in line with the expectations of shareholders and other stakeholders.

The Committee has also reviewed the metrics attached to share incentives for executive directors. Earnings per share ("EPS") continues to be considered by the Committee as one of the broadest and most well understood measures of the Company's long-term financial performance and therefore it remains appropriate to maintain its use as a key metric in our Long-Term Incentive Plan. Furthermore, EPS is fully aligned with the

Company's objective of maintaining a sustainable dividend and this is aligned with the shareholder base. Similarly, Total Shareholder Return ("TSR") provides a fully aligned method of measuring Company performance and the Committee continues to believe that, used together, EPS and TSR remain the most appropriate measures to apply to long-term incentive awards to our executive directors.

Recruitment Remuneration

During 2016, the Committee was involved in the design of a remuneration package for the Company's new Chief Financial Officer, Paula Bell. While ensuring that the package remained in accordance with the effective Remuneration Policy, the Committee judged it to be appropriate to buy-out certain remuneration arrangements that Ms Bell would be forfeiting when leaving her employer to join Spirent. Details of these arrangements can be found of page 73. The Committee would seek to re-assure stakeholders that even including these buy-out awards, the maximum level of variable pay awarded to Ms Bell did not exceed the Policy's cap of 400% of base salary and represented the actual value of the awards forfeited by Ms Bell in order to join Spirent.

The Committee

As you will be aware, I will be stepping down from the role of Chairman of the Remuneration Committee and as a Non-executive Director of the Company at the conclusion of the 2017 AGM, after seven and ten years service respectively.

The executive remuneration landscape is a constantly changing environment, and the challenge of designing and implementing a remuneration framework that is both fit for purpose in a company with a large employee community in the US market, and at the same time compliant with the expectations and requirements of the UK investment constituency has, at times, been quite a balancing act.

I count myself lucky to have been supported throughout my tenure as Chairman by well-informed and experienced fellow directors and knowledgeable and proficient management within Spirent. My place as Committee Chairman will be taken on by Gary Bullard, who joined the Board in December 2016 and brings with him a wealth of experience gained in the same role at Rotork plc. I wish him the very best of luck for the future.

I hope you find this Report clear and informative. I will be available at the 2017 AGM to respond to any questions that shareholders may have, as will Gary Bullard, who will take over the role of Committee Chairman at the conclusion of the meeting.

Tom Maxwell
Chairman, Remuneration Committee
2 March 2017

Compliance statement

This Report on directors' remuneration for the year ended 31 December 2016 has been prepared on behalf of the Board by the Remuneration Committee in accordance with Schedule 8 to the Large and Medium-sized Companies and Groups (Accounts and Reports) (Amendment) Regulations 2013 and the relevant sections of the Companies Act 2006 and meets the requirements of the Listing Rules of the Financial Conduct Authority. The Report also describes how the Board has complied with the provisions of the 2014 UK Corporate Governance Code. The Board acknowledges that revisions were made to the Code in April 2016 and, in line with reporting requirements, will report to shareholders on the Company's compliance with the revised code in next year's Annual Report.

The Report is presented in two parts: the Directors' Annual Remuneration Report and the Directors' Remuneration Policy.

The Directors' Annual Remuneration Report sets out details of how our remuneration policy was implemented for the year ended 31 December 2016 and how it will be applied for the year ended 31 December 2017. At the 2017 AGM to be held on 3 May 2017 the Directors' Annual Remuneration Report on pages 64 to 77 will be put to an advisory shareholder vote.

The current Directors' Remuneration Policy was approved by a binding vote at the 2016 AGM and became effective on 5 May 2016.

Directors' annual remuneration report 2016

Statement of implementation of remuneration policy in 2017 (unaudited)

Information on how the Company intends to implement the revised Directors' Remuneration Policy in 2017 is set out below.

Salary

	2017	2016
Eric Hutchinson	£400,000	£400,000
Paula Bell[1]	£330,000	£330,000

Note
1 Paula Bell was appointed to the Board on 5 September 2016 and therefore only received a proportion of the figure shown for 2016.

Benefits

- Life insurance cover of four times annual base salary
- Permanent health insurance
- Private healthcare cover for executive and family
- Car allowance

Retirement benefits

Eric Hutchinson will receive a taxable cash sum in lieu of pension at a rate of 20 per cent of base salary.

Paula Bell will receive a taxable cash sum in lieu of pension at a rate of 20 per cent of base salary.

Annual cash incentive

The Committee has set targets for the year focused on trading profit, revenue and strategic and operational priorities. Although the target detail is considered commercially sensitive, the weightings for the year ended 31 December 2017 are as follows:

Trading profit	60%
Revenue	20%
Strategic and Operational Priorities	20%

On-target and maximum annual cash incentive payments are as follows:

	On target performance % of base salary	Maximum % of base salary
Eric Hutchinson	100	150
Paula Bell	70	100

Details of these targets and their achievement will be disclosed in the Directors' annual remuneration report 2017.

Award under Spirent Long-term Incentive Plan

It is anticipated that the following award will be made under the new LTIP in 2017:

	Anticipated value of award
Eric Hutchinson	£600,000
Paula Bell	£330,000

The awards are made in the form of performance shares, which are valued at the share price on the date of grant.

Having reviewed the performance targets for awards under the LTIP, the Committee has determined that for the Performance Shares awards to be made in 2017, the following parameters are appropriate, calculated over a three-year performance period:

50 per cent of award:

Target EPS (adjusted) at the conclusion of the performance period	Proportion of Performance Shares vesting (%)
Below 15% growth	0
15% growth	25
Above 15% growth and below 20% growth	On a straight-line basis between 25 and 50
20% growth	50
Above 20% growth and below 32% growth	On a straight-line basis between 50 and 100
32% growth and higher	100

The EPS performance period normally starts at the beginning of the financial year in which the award is made.

50 per cent of award:

Absolute TSR[1]	Indicative share price[2]	Proportion of Performance Shares vesting (%)
Up to 17% growth	below 115 pence	0
At 17% growth but below 42% growth	115 pence	On a straight-line basis between 25 and 100
42% growth or higher	140 pence	100

Notes
1 Share price including reinvested dividends.
2 Indicative share price based on an average share price at the beginning of the performance period of 98 pence.

In determining TSR growth for the Company, share prices will be averaged over 90-day periods immediately prior to the announcement of the 2016 Full Year results on 2 March 2017 and the 2019 Full Year results.

Audited information

Single figure of total remuneration for 2016

The table below provides a single figure of total remuneration for 2016 and 2015 for the executive directors[1].

	Salary[2] £000	Benefits[3] £000	Annual cash incentive[4] £000	Long-term incentive[5] £000	Pension[6] £000	Total 2016 £000
Eric Hutchinson	400.0	16.9	135.7	–	80.0	632.6
Rachel Whiting[7]	163.9	1.1	27.8	–	23.0	215.8
Paula Bell[8]	107.9	182.2	111.3	–	21.6	423.0

	Salary[2] £000	Benefits[3] £000	Annual cash incentive[4] £000	Long-term incentive[5] £000	Pension[6] £000	Total 2015 £000
Eric Hutchinson	400.0	17.1	–	–	80.0	497.1
Rachel Whiting	250.0	0.3	–	–	35.0	285.3

Notes
1 All executive directors who served during 2015 and 2016 are UK based and paid in sterling, therefore the data is presented in this currency.
2 Salary and fees: cash paid in respect of the year.
3 Benefits: taxable value of all benefits in respect of the year which comprise relocation expenses, private healthcare, permanent health insurance, life insurance and car allowance.
4 Annual cash incentive: cash incentive payable in respect of the year.
5 Long-term incentive: value of Performance Shares vesting in the year based on the performance condition that ends in the year.
6 Pension: cash value in lieu of pension.
7 Rachel Whiting stepped down from the Board on 4 May 2016 and retired from the Company on 6 September 2016; the figures shown represent the amounts earned until the date of her retirement in September 2016.
8 Paula Bell was appointed to the Board on 5 September 2016.

Annual performance incentives

During 2016, cash incentives were available to executive directors on an annual basis, with a maximum total cash incentive available for Eric Hutchinson of 150 per cent of base salary, with a maximum total cash incentive available of 75 per cent and 100 per cent respectively for Rachel Whiting and Paula Bell. The cash incentives available for Mrs Whiting and Ms Bell were subject to pro-rating for the time each served in role.

Growth targets in the Company's trading profit and order intake, representing 70 per cent and 30 per cent of the incentive respectively, determined the maximum incentive which could be earned in respect of the annual incentive element. The minimum performance threshold for trading profit of $40.0 million was passed, with $46.5 million reported, but the minimum performance threshold for order intake of $475.0 million was missed, with only $471.7 million reported. As a result, annual cash incentives for the executive directors were paid at 33.9 per cent of their target amounts with Eric Hutchinson receiving a payout of £135,680, Rachel Whiting receiving a payout (after pro-rating for time served in role) of £27,804 and Paula Bell receiving a payout (after pro-rating for time served in role) of £25,331. In the prior year, targets were not achieved, with no awards earned.

Paula Bell also received a cash incentive payment of £86,000 relating to the period, further details of which can be found on page 73.

Relocation expenses

Following her appointment as Chief Financial Officer, Paula Bell received £176,940 in cash as relocation expenses. The amount reimbursed is subject to a three-year clawback from her start date, with the balance of the clawback reducing by one-third on each anniversary of that start date.

Total pension entitlements

Eric Hutchinson receives a taxable cash allowance in lieu of pension of 20 per cent of base salary. For 2016, the allowance paid was £80,000 (2015 £80,000).

Paula Bell receives a taxable cash allowance in lieu of pension of 20 per cent of base salary. Ms Bell was appointed on 5 September 2016 and for 2016, the allowance paid was £21,500.

While serving as an executive director, Rachel Whiting received a taxable cash allowance in lieu of pension of 14 per cent of base salary. For 2016, the allowance paid was £22,952 (2015 £34,999).

External appointments

Neither Eric Hutchinson nor Rachel Whiting held any external positions during the year under review or to the date of this Report.

On appointment, the Board agreed that it was acceptable for Paula Bell to continue with her non-executive role with Laird plc. Fees in respect of this directorship are paid directly to and retained by Ms Bell.

Payments to past directors

There were no payments made to past directors during the year under review other than those payments to Rachel Whiting in respect of her employment with the Company between stepping down from the Board on 4 May 2016 and retiring from the Company on 6 September 2016.

Payments for loss of office

There were no payments for loss of office during the year under review.

Non-executive director fees

Details of individual appointments are as follows:

Director	First appointed as a director	Current appointment due to expire
Gary Bullard	1 December 2016	2017 AGM
Tom Lantzsch[1]	11 May 2015	2019 AGM
Tom Maxwell[2]	1 October 2007	2017 AGM
Jonathan Silver	25 June 2015	2019 AGM
Sue Swenson	1 February 2012	2018 AGM
Bill Thomas	1 December 2016	2017 AGM
Alex Walker[3]	22 December 2006	2018 AGM

Notes

1 Tom Lantzsch will be stepping down from the Board on 3 March 2017 and therefore will not seek re-election at the 2017 AGM.

2 Tom Maxwell will not seek re-election at the 2017 AGM and will step down as Chairman of the Remuneration Committee and as a Non-executive Director at the conclusion of the 2017 AGM.

3 Alex Walker will not seek re-election at the 2017 AGM and will step down as Chairman of the Board and as a Non-executive Director at the conclusion of the 2017 AGM.

Fees for the non-executive directors are normally reviewed by the Board once every three years and were last reviewed on 1 January 2017, having been frozen since 1 January 2008. It was determined that the basic annual fee for non-executive directors would remain at £40,000 per annum for 2017. Fees for the Chairman, which are determined by the Remuneration Committee, will remain at £160,000 per annum for 2017, having been frozen since 1 January 2009. The Chairmen of the Audit and Remuneration Committees each receive additional fees of £11,000 and £9,000 per annum respectively in recognition of the increased time commitment of these roles. During the period under review, the person who filled the role of Senior Independent Director also received an additional fee of £7,500 per annum in recognition of the increased time commitment associated with the role. In November 2016, when the role was taken on by the incumbent Chairman of the Audit Committee to faciliate the recruitment of a new Chairman, he agreed not to receive an additional fee.

Fees for non-executive directors and the Chairman will be reviewed again for the period effective 1 January 2018 onwards.

Details of fees paid to non-executive directors in 2016 and 2015 are as follows:

	2016 £000	2015 £000
Alex Walker (Chairman)	**160.0**	160.0
Ian Brindle[1]	**n/a**	30.5
Gary Bullard[2]	**3.3**	n/a
Tom Lantzsch[3]	**40.0**	25.6
Duncan Lewis[4]	**10.0**	40.0
Tom Maxwell	**49.0**	49.0
Jonathan Silver[5]	**51.0**	24.9
Sue Swenson[6]	**46.3**	43.0
Bill Thomas[7]	**3.3**	n/a
Total	**362.9**	373.0

Notes

1 Ian Brindle retired from the Board on 7 August 2015.

2 Gary Bullard was appointed to the Board on 1 December 2016.

3 Tom Lantzsch joined the Board on 11 May 2015.

4 Duncan Lewis served as a director until his death in March 2016.

5 Jonathan Silver joined the Board on 25 June 2015.

6 Sue Swenson served as Senior Independent Director until November 2016, receiving an additional fee of £7,500 per annum, pro rated for the duration of her tenure in the role.

7 Bill Thomas was appointed to the Board on 1 December 2016.

Statement of directors' shareholdings and share interests

The beneficial interests of the directors and their connected persons in the shares of the Company are set out below:

	At 31 December 2015 Ordinary Shares[1]	At 31 December 2016 Ordinary Shares[1]	At 2 March 2017 Ordinary Shares[2]
Executive directors			
Paula Bell[3]	n/a	–	–
Eric Hutchinson	1,366,809	1,727,324	1,727,816
Rachel Whiting[4]	86,937	94,205	n/a
Non-executive directors			
Gary Bullard[5]	n/a	–	–
Tom Lantzsch	–	60,000	60,000
Duncan Lewis[6]	–	–	–
Tom Maxwell	50,000	100,000	100,000
Jonathan Silver	30,000	70,000	70,000
Sue Swenson	–	–	–
Bill Thomas[7]	n/a	–	–
Alex Walker	270,959	342,458	342,458

Notes
1 Directors' beneficial interests do not form part of the remuneration provided by the Company.
2 Events since 31 December 2016:
On 24 January 2017, Eric Hutchinson acquired 254 Ordinary Shares under the UK Employee Share Purchase Plan at a price of 98.5 pence per share.
On 24 February 2017, Eric Hutchinson acquired 238 Ordinary Shares under the UK Employee Share Purchase Plan at a price of 104.5 pence per share.
3 Paula Bell joined the Board on 5 September 2016.
4 Rachel Whiting stepped down from the Board on 4 May 2016; the figures shown represent her beneficial interests on 6 September 2016, when she retired from the Company.
5 Gary Bullard joined the Board on 1 December 2016.
6 Duncan Lewis died on 15 March 2016.
7 Bill Thomas joined the Board on 1 December 2016.

Shareholding guidelines for executive directors

The Committee believes that to further align their interests with those of shareholders, executive directors should have a significant shareholding in the Company equivalent to at least 100 per cent of their base salary in the form of shares and unfettered share incentive awards which may be built up over time following appointment as an executive director. The table below sets out the holdings of the executive directors who served during the year at 31 December 2016 or the date they left the Company:

	Guideline holding	Beneficially owned shares	Unfettered share incentives	Guideline met?
Paula Bell[1]		–	–	No
Eric Hutchinson	100% of base salary	1,727,324	–	Yes
Rachel Whiting[2]		94,205	–	No

Notes
1 Paula Bell was appointed to the Board on 5 September 2016.
2 Rachel Whiting stepped down from the Board on 4 May 2016, and retired as an employee of the Company on 6 September 2016.

Outstanding share incentive awards[1]

The share incentive interests of executive directors who served during the period 1 January 2016 to the date of this Report are set out below:

Eric Hutchinson

	Lapsed		Unvested		
Plan Type	EIP	EIP	EIP	EIP	LTIP
Award Type	PS	SAR	PS	PS	PS
Award Date	8 May 2013	8 May 2013	28 April 2014	18 May 2015	16 June 2016
At 1 January 2016 (or date of appointment)	172,531	86,266	493,583	578,035	–
Granted during the period	–	–	–	–	781,758
Vested during the period	–	–	–	–	–
Lapsed during the period	172,531[2]	86,266[2]	–	–	–
Any other adjustments during the period	–	–	–	–	–
At 31 December 2016 (or at date of cessation)	–	–	493,583	578,035	781,758
Market price at date of award (£)[3]	1.2910	1.2910	1.0130	0.8650	0.7675
Face value of award granted in period (£)	222,737	111,369	500,000	500,000	600,000
Exercise price (£)	Nil[4]	1.2910	Nil[4]	Nil[4]	Nil[4]
Subject to performance conditions?	Yes	Yes	Yes	Yes	Yes
Performance condition	50% EPS, 50% TSR	EPS	50% EPS, 50% TSR	50% EPS, 50% TSR	50% EPS, 50% TSR
Performance condition testing date[5]	8 May 2016	8 May 2016	28 April 2017	18 May 2018	16 June 2019
Result of performance condition testing	0%	0%	–	–	–
Market price at vesting date (£)	0.8225	0.8225	–	–	–
Exercise date	–	–	–	–	–
Market price at exercise date (£)	–	–	–	–	–
Gain on exercise (£)	–	–	–	–	–
Expiry date	8 May 2016	8 May 2016	28 April 2017	18 May 2018	16 June 2019

Rachel Whiting

	Exercised	Lapsed		
Plan Type	EIP	EIP	EIP	EIP
Award Type	SAR	PS	PS	PS
Award Date	5 May 2006	8 May 2013	28 April 2014	18 May 2015
At 1 January 2016 (or date of appointment)[6]	60,348	24,262	148,075	173,410
Granted during the period	–	–		–
Vested during the period	–	–	–	–
Lapsed during the period	–	24,262[2]	148,075[7]	173,410[7]
Any other adjustments during the period	–	–	–	–
At 31 December 2016 (or at date of cessation)	–	–	–	–
Market price at date of award (£)[3]	0.4750	1.2910	1.0130	0.8650
Face value of award granted in period (£)		31,322	150,000	150,000
Exercise price (£)	0.4750	Nil[4]	Nil[4]	Nil[4]
Subject to performance conditions?	Yes	Yes	Yes	Yes
Performance condition	EPS	50% EPS, 50% TSR	50% EPS, 50% TSR	50% EPS, 50% TSR
Performance condition testing date[5]	5 May 2009	8 May 2016	6 September 2016	6 September 2016
Result of performance condition testing	100% vest	0%	0%	0%
Market price at vesting date (£)	0.595	0.8225	0.8000	0.8000
Exercise date	29 February 2016	–	–	–
Market price at exercise date (£)	0.83	–	–	–
Gain on exercise (£)	21,423.54	–	–	–
Expiry date	5 May 2016	8 May 2016	6 September 2016	6 September 2016

Paula Bell[8]

	Unvested	
Plan Type	LTIP	LTIP
Award Type	PS	PS
Award Date	30 September 2016	30 September 2016
At 1 January 2016 (or date of appointment)	–	–
Granted during the period	268,293	292,683
Vested during the period	–	–
Lapsed during the period	–	–
Any other adjustments during the period	–	–
At 31 December 2016 (or at date of cessation)	268,293	292,683
Market price at date of award (£)[3]	0.8200	0.8200
Face value of award granted in period (£)	220,000	240,000
Exercise price (£)	Nil[4]	Nil[4]
Subject to performance conditions?	Yes	Yes
Performance condition	50% EPS, 50% TSR	50% EPS, 50% TSR
Performance condition testing date[5]	5 March 2018	30 September 2019
Result of performance condition testing	–	–
Market price at vesting date (£)	–	–
Exercise date	–	–
Market price at exercise date (£)	–	–
Gain on exercise (£)	–	–
Expiry date	5 March 2018	30 September 2019

Notes

An explanation of each share plan and its operation is given in note 30 to the audited consolidated financial statements of the Group.

1 Key to share plan and type of award:
EIP SAR – 2005 Employee Incentive Plan Stock Appreciation Rights.
EIP PS – 2005 Employee Incentive Plan Performance Shares awarded as conditional share awards.
LTIP PS – 2016 Long-term Incentive Plan Performance Shares awarded as conditional share awards.

2 The awards of EIP Performance Shares granted on 8 May 2013 were due to vest on 8 May 2016. However, after the testing of performance conditions attached to these awards the Remuneration Committee confirmed that the performance condition thresholds had not been met, resulting in the lapsing of the awards in full.

3 The market price on date of grant is the price of an Ordinary Share at the close of business on the day before the date of grant.

4 There is no exercise price payable for a Performance Share upon vesting.

5 Awards which have passed the date first exercisable have vested and are unfettered, having passed the relevant performance conditions.

6 Rachel Whiting was appointed to the Board on 1 February 2014; some of the awards shown were awarded prior to her appointment as Chief Financial Officer.

7 Rachel Whiting stepped down from the Board at the conclusion of the 2016 AGM and retired from her employment with the Company on 6 September 2016. Her outstanding share incentive awards were dealt with in accordance with the Remuneration Policy effective on the date she left the employment of the Company, 6 September 2016.

8 Paula Bell was appointed to the Board on 5 September 2016. Details of her awards are set out on page 73.

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Scheme interests awarded during the year

Eric Hutchinson

In 2016, the Committee approved an award of Performance Shares to Mr Hutchinson equivalent to 150 per cent of base salary.

The performance conditions for Performance Shares awarded in 2016 under the LTIP are calculated over a three year performance period as set out in the following table:

50 per cent of award:

Target EPS (adjusted) at the conclusion of the performance period	Proportion of Performance Shares vesting (%)
Below 8 cents	0
8 cents	25
Above 8 cents and below 12 cents	On a straight-line basis between 25 and 100
12 cents or higher	100

The EPS performance period normally starts at the beginning of the financial year in which the award is made.

50 per cent of award:

Absolute TSR	Indicative share price[1]	Proportion of Performance shares vesting (%)
Up to 25% growth	below 88 pence	0
At 25% growth but below 100% growth	88 pence	On a straight-line basis between 25 and 100
100% growth or higher	140 pence	100

Note
1 Share price including reinvested dividends.

In determining TSR growth for the Company, share prices will be averaged over 90 day periods immediately prior to the announcement of the 2015 Full Year results on 25 February 2016 (70.35 pence) and the 2018 Full Year results.

Paula Bell

The Remuneration Committee approved three awards to Ms Bell to “buy-out” remuneration arrangements forfeited by Ms Bell on leaving her previous employer. The value of the awards were calculated at the time of Ms Bell’s contractual negotiations, based on the value of the existing awards:

Award 1

The Remuneration Committee approved a payment of up to a value of £86,000 in cash to be paid to Ms Bell subject to her performance in the period to 31 December 2016. Although the forfeited award was a share incentive award, the Committee considered that due to the brevity of the remaining performance period attached to the original award, it was appropriate to buy-out this award in cash.

Award 2

An on-hire award to the value of £240,000 was made in the form of Performance Shares with identical performance conditions and period to Mr Hutchinson’s 2016 award shown above.

Award 3

An award to the value of £220,000 was made in the form of Performance Shares to “buy-out” an award forfeited by Ms Bell on leaving her former employer.

The value of this award was calculated based on the likely value of awards forfeited by Ms Bell on leaving her former employer and the award’s performance period was reduced from the standard three years to reflect the vesting date of the forfeited award. The performance conditions for the award are:

50 per cent of award:

Target EPS (adjusted) at the conclusion of the performance period	Proportion of Performance Shares vesting (%)
Below 6.50 cents	0
6.50 cents	25
Above 6.50 cents and below 8.50 cents	On a straight-line basis between 25 and 100
8.50 cents or higher	100

The EPS performance period was the two financial years ending on 31 December 2017.

50 per cent of award:

Absolute TSR	Proportion of Performance shares vesting (%)
Up to 16.7% growth	0
At 16.7% growth but below 66.7% growth	On a straight-line basis between 25 and 100
66.7% growth or higher	100

Note
1 Share price including reinvested dividends.

In determining TSR growth for the Company, share prices will be averaged over 90 day periods immediately prior to the announcement of the 2015 Full Year results on 25 February 2016 (70.35 pence) and the 2017 Full Year results.

Share interests vesting during 2017

Awards which are due to vest on 28 April 2017 and are subject to an EPS performance condition have not passed that condition and will lapse on that date.

Awards which are due to vest on 28 April 2017 and are subject to a TSR performance condition will have that performance condition tested on 28 April 2017.

No new shares were issued during the year, with all exercises of share incentives being satisfied by the transfer of shares held by the Company's Employee Share Ownership Trust ("ESOT"). At the date of this Report, the ESOT holds 0.6 million Ordinary Shares for the purpose of satisfying the exercises of current and future awards by employees and former employees of the Group.

Dilution

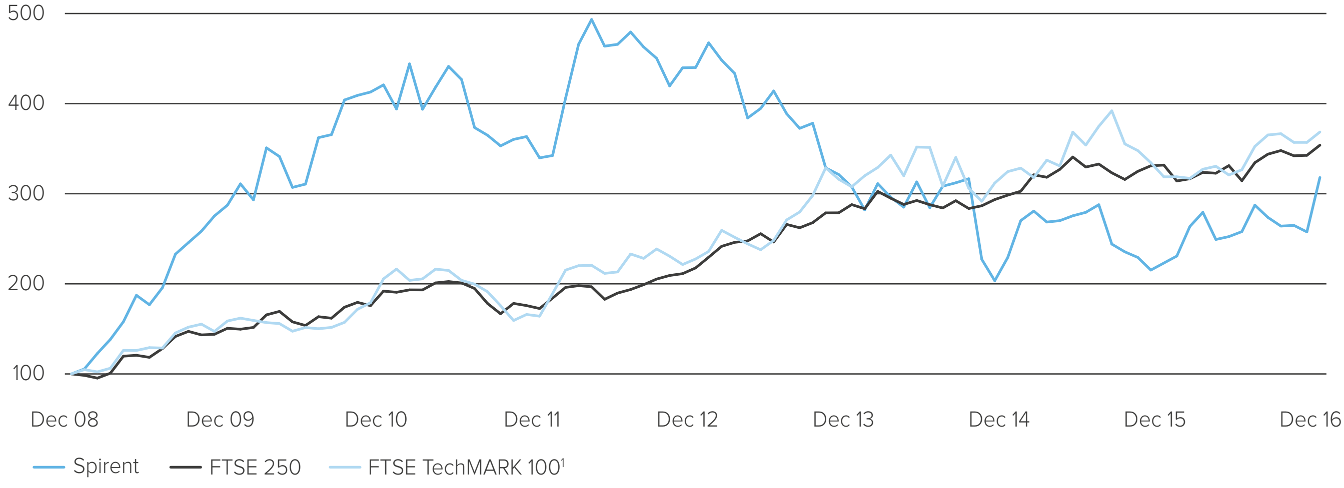
Overall shareholder dilution resulting from the Company's share incentive plans (on a rolling ten-year basis) has fallen by 0.9 per cent when comparing the positions at 31 December 2016 (6.5 per cent) and 31 December 2015 (7.4 per cent). The overall number of share incentives outstanding has increased by 0.9 million during the year to 10.6 million at 31 December 2016 (2015 9.7 million).

Unaudited information

Total shareholder return performance

The graph below shows the TSR performance for the last eight financial years of Spirent Communications plc against the FTSE 250 Index and the FTSE TechMARK 100 Index, excluding those companies who were also constituents of the FTSE 100 Index at the commencement of the period.

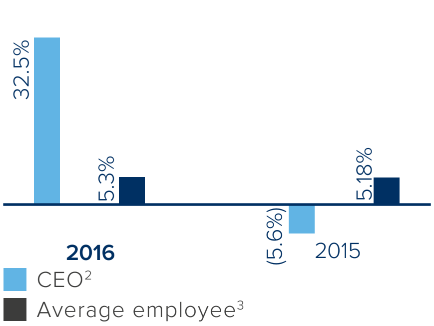
Eight-year TSR performance – Spirent vs FTSE TechMARK[1] and FTSE 250



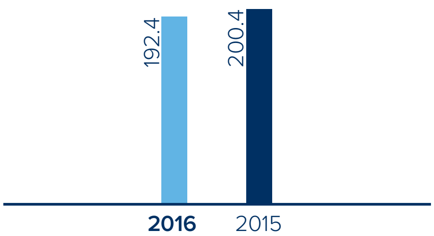
Note
1 As of 1 January 2009, excluding FTSE 100 companies.

The middle market price of an Ordinary Share at the close of business on 4 January 2016 and 30 December 2016 (being the first and last days the London Stock Exchange was open for trading in 2016) was 70.00 pence and 98.75 pence respectively, and during that period ranged between a high of 100.00 pence and a low of 66.25 pence.

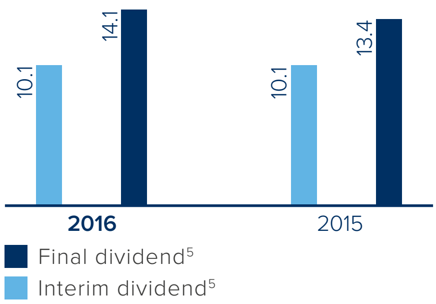
Percentage change in the remuneration of the director undertaking the role of CEO compared to the percentage change in remuneration of average employee[1]



Remuneration paid to all employees
$ million[4]



Returns to shareholders
$ million



Notes
1 The graph shows the change in CEO's annual cash remuneration, defined as base salary, taxable benefits and cash incentive, compared to that of the average employee for 2015 and 2016.
2 As explained on page 66, the CEO did not receive a base salary increase in 2015 or in 2016. The increase shown in this graph represents the payout of the CEO's annual cash incentive relating to 2016, compared to the nil annual cash incentive payout received in 2015.
3 As set out in note 9 to the consolidated financial statements.
4 Total as set out in note 9 to the consolidated financial statements.
5 Total as set out in note 13 to the consolidated financial statements.

Table of CEO remuneration[1]

Year	CEO	CEO single figure of total remuneration £000	Annual bonus payout against maximum opportunity %	Long-term incentive vesting rates against maximum opportunity %
2016	Eric Hutchinson	632.6	22.6	–
2015	Eric Hutchinson	497.1	–	–
2014	Eric Hutchinson	521.6	–	–
2013	Eric Hutchinson[2]	186.9	12.0	–
2013	Bill Burns[3]	401.3	–	–
2012	Bill Burns	931.8	40.5	34
2011	Bill Burns	1,309.6	93.3	84
2010	Bill Burns	1,279.9	100.0	100
2009	Bill Burns	997.8	93.9	100

Notes
1 Prior year data in this table has been recalculated from US dollars to be presented in sterling at the following average exchange rates: 2014 $1.65:£1; 2013 $1.56:£1; 2012 $1.58:£1; 2011 $1.60:£1; 2010 $1.54:£1; 2009 $1.57:£1.
2 Eric Hutchinson took up the position of Chief Executive Officer on 3 September 2013.
3 Earnings disclosed are to 3 September 2013, when Bill Burns stepped down as Chief Executive Officer.

Statement of shareholder voting

At the 2016 AGM on 4 May 2016 the results of shareholder's voting on remuneration matters were as follows:

Advisory vote regarding the Report on directors' remuneration for the year to 31 December 2015:

Votes For[1]	%	Votes Against	%	Votes Cast	Votes Withheld[2]
471,761,516	98.82	5,609,427	1.18	477,370,943	25,162

Binding vote regarding the revised Remuneration Policy, to be effective from 5 May 2016:

Votes For[1]	%	Votes Against	%	Votes Cast	Votes Withheld[2]
461,594,887	96.70	15,772,687	3.30	477,367,574	28,531

Notes
1 The "For" vote includes those giving the Company Chairman discretion.
2 A vote withheld is not a vote in law and is not counted in the calculation of the votes "For" and "Against" the resolution.

Votes "For" and "Against" are expressed as a percentage of total votes cast.

Remuneration Committee

Responsibilities

The Remuneration Committee is responsible to the Board for determining:

- remuneration policy for the executive directors and Chairman taking into account remuneration trends across the Company;
- specific terms and conditions of employment of each individual executive director;
- overall policy for remuneration for the executive directors' direct reports;
- design and monitoring of the operation of any Company share incentive plans;
- setting stretching incentive targets to encourage enhanced performance;
- determining an approach that rewards fairly and responsibly contribution to the Company's long-term success; and
- other provisions of the executive directors' service agreements and ensuring that contractual terms on termination, and payments made, are fair to the individual and the Company and that failure is not rewarded and loss is mitigated.

The Committee's remit is set out in detail in its terms of reference, which are reviewed regularly and were approved in February 2016. They are available on the Company's website at http://corporate.spirent.com.

Composition of the Committee

At the date of this Report, the Remuneration Committee comprises six independent non-executive directors, one of whom acts as Committee Chairman. The Company Secretary serves as Secretary to the Committee. All members are considered independent within the meaning of the 2014 UK Corporate Governance Code (the "Code").

Advisers to the Committee

During the year the Committee also consulted with the Company's Chairman, Chief Executive Officer, Chief Financial Officer and the Company Secretary & General Counsel but not on matters relating to their own remuneration.

Deloitte LLP was appointed by the Committee in 2015 to undertake a market review of executive remuneration practices and assist with the design and introduction of a new long-term incentive plan. The Committee is satisfied that Deloitte LLP is independent, thoughtful and challenging. Deloitte LLP is also a member of the Remuneration Consultants Group and complies with its voluntary Code of Conduct in respect of the provision of remuneration consulting services, details of which can be found at www.remunerationconsultantsgroup.com. The Committee considers Deloitte LLP to be independent in their approach.

The fees paid to Deloitte LLP to carry out work for the Remuneration Committee during the period under review totalled £65,880 (2015 £27,300) and were based on time and materials.

Kepler Associates Limited, who were acquired in June 2015 by Mercer Limited, were appointed by the Committee some years ago to provide the results of TSR testing to determine the vesting of share incentives. The Committee has retained Mercer Limited in this role because it values the robust data provided and continuity of advice from the consultants involved. The Committee is satisfied that Mercer Limited is independent, thoughtful and challenging. Mercer Limited is a member of the Remuneration Consultants Group and complies with its voluntary Code of Conduct in respect of the provision of remuneration consulting services, details of which can be found at www.remunerationconsultantsgroup.com and has no other connection to the Company. The Committee considers Mercer Limited to be independent in their approach.

The fees paid to Mercer Limited to carry out work for the Remuneration Committee during the period under review totalled £7,260 (2015 £3,300) and were based on time and materials.

Directors' Remuneration Policy (unaudited)

This section sets out the Remuneration Policy for executive and non-executive directors. This Remuneration Policy was subject to a binding vote at the 2016 AGM on 4 May 2016 and, having received 96.7% of votes in favour, became effective on 5 May 2016. The Policy will be put to shareholders again no later than the 2019 AGM. The most significant change from the policy approved at the Company's 2014 AGM was the introduction of the new Spirent Long-term Incentive Plan (the "LTIP").

The Company's previous Remuneration Policy was approved by shareholders at the Company's 2014 AGM held on 23 April 2014 with 99.02 per cent of all votes cast in favour and it had a binding effect on the Company from 24 April 2014.

Components of executive director remuneration

The Committee's policy is to set remuneration levels which ensure that executive directors are fairly and responsibly rewarded in return for high levels of performance. The remuneration policy set by the Committee aims to promote value creation through transparent alignment with the agreed corporate strategy, supporting performance and encouraging the underlying sustainable financial health of the business while promoting sound risk management for the benefit of all stakeholders. The Committee believes that the aims of the policy are achieved by ensuring that a significant proportion of executive remuneration is tied to the achievement of the agreed corporate strategy and long-term value creation.

Fixed pay

Purpose and link to strategy	Key features
Base salary	
To provide fixed remuneration for each role which reflects the size and scope of the executive director's responsibilities and their individual skills and experience	Base salaries are normally reviewed annually, with changes effective from 1 January Set at levels to recruit and retain the high calibre talent needed to deliver the Group's strategy without paying more than is considered necessary Salaries are typically set after considering various factors including the salary levels in companies of a similar size and complexity, the responsibilities of each individual role, progression within the role, individual performance and an individual's experience and with regard to market salary levels in the country in which the executive resides. Our overall policy, having had due regard to the factors noted, is normally to target salaries at the median market level
Benefits	
To provide market levels of benefits on a cost-effective basis	May include private health cover for the executive and their family, life insurance cover of up to four times annual base salary, permanent health insurance and a car allowance Executive directors may participate in any all-employee share plans which may be operated by the Company on the same terms as other employees Global relocation support and any associated costs or benefits may also be provided if considered by the Committee to be appropriate and reasonable to meet the requirements of the business Other benefits may be offered from time to time broadly in line with local market practice in the country of residence of the executive director
Retirement benefits	
To provide cost-effective and competitive post-retirement benefits	Defined contribution scheme or cash allowance in lieu of Company pension contributions or a combination of both Other post-retirement benefits may be offered from time to time broadly in line with local market practice in the country of residence of the executive director
Variable pay	
Annual incentive	
To reward and incentivise the achievement of annual financial and strategic goals which are selected to align the strategy of the business and support enhancement of shareholder value	The annual incentive is normally payable in cash and is not pensionable The Remuneration Committee may, in exceptional circumstances, amend the payments should this not, in the view of the Committee, reflect overall business performance or individual contribution. Any such amendment would be reported to shareholders Clawback provisions apply to any annual incentive payments made. Prior to payment of any cash incentive, the Committee could exercise its discretion and make no payment due to a malus event
Long-term incentive	
To incentivise executives to achieve the Company's long-term strategy and enhance sustainable shareholder value	Discretionary awards of conditional awards (or economic equivalent) may be granted to executive directors annually, calculated as a percentage of base salary Malus and clawback provisions will apply to all awards made under the new Spirent Long-term Incentive Plan

Maximum potential value	Performance metrics
While there is no defined maximum salary, any increase in salary will ordinarily be (in percentage terms) in line with those of the wider workforce, having particular regard to the increases in the country in which the individual resides Increases beyond those granted to the wider workforce (in percentage terms) may be awarded in certain circumstances, for example where there is a change in responsibility, progression in the role, experience or a significant increase in the scale of the role and/or size, value and/or complexity of the Group Details of current salary levels are set out in the Annual report on remuneration	None
The overall value of benefits will depend on the individual's circumstances and therefore there is no formal maximum Participation in all-employee share plans will be in line with relevant statutory limits It is intended that the maximum value of benefits offered will remain broadly in line with market practice in the location in which the executive director operates	None
It is intended that the maximum value of retirement benefits offered will remain broadly in line with market practice in the location in which the executive director operates Pension arrangements for current executive directors are set out in the Annual report on remuneration	None
The annual incentive starts accruing from threshold levels of performance CEO: On target opportunity of 100 per cent base salary, subject to cap of 150 per cent base salary CFO: On target opportunity of 70 per cent of base salary, subject to cap of 100 per cent base salary	Annual incentives may be based on a mix of financial and individual and business objectives with the majority of the weighting being given to financial metrics Measures, weightings and targets are determined by the Remuneration Committee each year taking into account the Group's key strategic priorities and the approved budget for the year and are set out in the Annual report on remuneration
Maximum plan limit for awards is 200 per cent of base salary Details of proposed award levels for 2017 are set out in the Annual report on remuneration	Award levels and performance conditions are reviewed before each award cycle to ensure they remain appropriate. Vesting is based on performance measured over three years. A full description of the performance conditions applicable to long-term incentive awards are set out in the Annual report on remuneration

Notes to the policy table

Performance conditions for awards under the Spirent Long-Term Incentive Plan ("LTIP")

The Committee reviews the appropriateness of performance parameters for each award under the LTIP and sets stretching performance conditions in the light of the Company's current and expected performance over the performance cycle.

2017 Policy on share incentive awards

The Committee expects to approve awards of Performance Shares to the CEO and CFO equivalent to 150 per cent and 100 per cent of annual base salary respectively.

Approach to recruitment remuneration

In the event that the Company recruits a new executive director (either from within the organisation or externally), when determining the appropriate remuneration arrangements, the Committee will take into consideration all relevant factors, (including but not limited to quantum, the type of remuneration being offered and the jurisdiction which the candidate was recruited from) to ensure that arrangements are in the best interests of both shareholders and the Company without paying more than is necessary to recruit an executive of the required calibre.

The Committee would generally seek to align the remuneration package offered with our Remuneration Policy outlined in the table above. However, the Committee retains discretion to make proposals on hiring a new executive director which are outside the standard Policy. In the first year of appointment, the Committee may offer additional remuneration arrangements that it considers appropriate and necessary to recruit and retain the individual. Such remuneration may be in the form of cash or share-based awards which may vest immediately or at a future point in time. Vesting may be subject to performance conditions selected by the Committee.

The Committee may make awards on appointing an executive director to "buy-out" remuneration arrangements forfeited on leaving a previous employer on a like-for-like basis. In doing so the Committee will take account of relevant factors, including any performance conditions attached to those awards, the form in which they were granted and the time over which they would have vested.

In the event of recruitment, the Committee may also grant an award to a new executive under Listing Rule 9.4.2 which allows for the granting of awards, specifically to facilitate, in unusual circumstances, the recruitment or retention of an executive director, without seeking prior shareholder approval.

The maximum level of variable pay which may be awarded to new executive directors would normally be in line with the maximum level of variable pay set out in the policy table above but in any event would be limited to 400 per cent of base salary, excluding any buy-out awards. Any additional cash or share-based awards on recruitment of an executive director which may fall outside the policy statement would be performance-related and would therefore be regarded as variable remuneration and fall within the Company's standard 400 per cent cap.

For an internal appointment, any remuneration terms awarded in respect of the previous role may either continue on its original terms or be adjusted to reflect the new appointment.

When recruiting non-executive directors, the remuneration arrangements offered would normally be in line with those paid to existing non-executive directors, details of which are set out in the Annual report on remuneration.

Service contracts

Executive Directors

In normal circumstances, it is the Company's Policy that service contracts for executive directors have no fixed term and are capable of termination on no more than 12 months' notice from either the Company or the executive director. It is intended that this policy would also apply to new appointments of executive directors.

Both Eric Hutchinson and Paula Bell currently have a service agreement with Spirent Communications plc, and, being UK residents, both their contracts are in line with UK employment practice and are governed by the laws of England and Wales. Eric Hutchinson's service agreement dated 8 December 2014 may be terminated on 12 months' notice from the Company and six months' notice from Mr Hutchinson. Paula Bell's service agreement, dated 12 April 2016 may be terminated on 12 months' notice from the Company and six months' notice from Ms Bell.

The Company recognises that its executive directors may, from time to time, be invited to become non-executive directors of other companies and that such appointments can broaden their knowledge and experience, to the benefit of the Company. Details of any such appointments are set out in the Annual report on remuneration.

The service agreements of executive directors are available for inspection on request and will be available for inspection at the 2017 AGM.

Non-executive Directors

All non-executive directors have a letter of appointment with the Company for a period of not more than three years, subject to the Company's Articles of Association. However, since 2011 and in accordance with the Code, all directors who are not stepping down from the Board will stand for re-election at each AGM.

The letters of appointment of non-executive directors are available for inspection on request and will be available for inspection at the 2017 AGM. An example of a letter of appointment for a non-executive director is available on the Company's website at http://corporate.spirent.com/

Remuneration policy for Non-executive Directors

The Board aims to recruit high calibre non-executive directors, with broad commercial, international or other relevant experience.

The Company's Remuneration Policy with regard to fees for non-executive directors, including the Chairman, is to pay fees which are in line with market practice for companies of a similar size and complexity. Individual fees reflect responsibility and commitment. Additional fees may be paid for further responsibilities, such as chairmanship of committees.

Non-executive directors are not eligible to participate in cash incentive or share incentive arrangements and their service does not qualify for pension. No element of their fee is performance-related. Travel and other reasonable expenses (including fees incurred in obtaining professional advice in the furtherance of their duties and any associated taxes) incurred in the course of performing their duties may be paid by the Company or reimbursed to non-executive directors.

When recruiting non-executive directors, the remuneration arrangements offered will generally be in line with those set out above.

Exit payment policy

The Committee is committed to ensuring that it does not pay more than is necessary when executives leave Spirent and its policy on exit payments is and will continue to be in line with market practice in the country in which the executive director resides. The current exit payment policy is:

- Service contracts contain provisions for the removal of the director without compensation for not performing their duties to the standard required by the Board or material misconduct
- Payment in lieu of notice may be paid under service contracts if the relevant notice period is not given to the director or if, having received notice from the director, the employer does not wish him/her to serve it
- Unless provided for in the service contract, the Company would seek to apply practical mitigation measures to any payment of compensation on termination, for example by reducing payments to reflect payments received in respect of alternative employment, taking into account all relevant circumstances
- Service contracts do not contain provision for additional compensation on termination following a change of control (as detailed in the Change of Control provisions set out in the Report of the directors on page 85)
- Service contracts do not contain provision for liquidated damages of any kind
- Service contracts contain appropriate provisions to protect the legitimate interests of the Company with respect to preventing any terminated director from working in a business which competes against the Company
- Incentives:

  – Cash incentives: Unless otherwise provided in the service contract to be consistent with market practice in the country in which the executive resides, executives are not entitled to accrued cash incentives payable following termination unless the individual is determined by the Committee to be a good leaver (defined as an individual leaving employment due to redundancy, ill-health, injury or disability, retirement, death, the individual's employing company ceasing to be under the control of the Group, or a transfer of the undertaking in which the individual works ("Good Leaver"));
  – Spirent Long-term Incentive Plan: Leaver provisions were approved by shareholders when they approved the LTIP in 2016. Unvested awards will generally lapse at the time of exit. For individuals determined by the Committee to be a Good Leaver, the Committee has discretion to either (i) assess performance conditions at the point of exit by testing the performance conditions up to the date of exit for TSR performance and to the end of the most recent financial period for EPS performance, or (ii) assess performance conditions at the end of the applicable vesting period or such earlier date as may be appropriate. Any shares which vest would then normally be pro-rated to reflect the proportion of the vesting period actually served by the individual;
  – Employee Incentive Plan (EIP): Leaver provisions were approved by shareholders when they approved the EIP in 2005 and 2015. Unvested awards generally lapse at the time of exit. For individuals determined by the Committee to be a Good Leaver, performance conditions are assessed by the Committee at the point of exit by testing the performance conditions up to the date of exit for TSR performance and to the end of the most recent financial period for EPS performance. Vesting is then pro-rated for the proportion of the performance period actually served and the individual has 12 months following the date of termination of employment in which to exercise them.

Consideration of employee remuneration arrangements elsewhere in the Group

When setting the policy for directors' remuneration, the Committee has regard to the pay and employment conditions elsewhere within the Group, particularly in the jurisdictions in which the executive directors are based. The Committee is kept informed on a regular basis of salary increases for the general employee population and takes these into account when determining salary increases for executive directors. No salary increase has been awarded for the role of either Chief Executive Officer or the Chief Financial Officer for 2017.

While the Committee does not directly consult with employees as part of the process of reviewing executive pay, the Committee does receive updates and feedback through employee engagement surveys and takes these into account when reviewing executive pay. An employee engagement survey was undertaken in 2014 and the results reviewed by senior management; it is expected that further employee engagement surveys will be undertaken regularly.

Consideration of the views of shareholders in setting Remuneration Policy

The Committee is mindful of the views of shareholders in determining appropriate levels of remuneration and in ensuring that shareholder and director interests are aligned. The Committee is committed to an ongoing dialogue with shareholders and seeks shareholder views when any significant changes are proposed to remuneration arrangements. In particular, the Committee consulted with major shareholders and shareholder representatives in January 2016 regarding the introduction of the new LTIP.

Legacy matters

For the avoidance of doubt, in approving this Remuneration Policy, authority is given to the Company to make payments and honour any commitments entered into with current or former directors (such as the payment of pension or the unwinding of legacy share schemes) where the terms were agreed either prior to 24 April 2014 (the effective date of the first directors' remuneration policy) or at a time when a previous remuneration policy was in force. Details of any payments will be set out in the Annual Report on Remuneration as they arise.

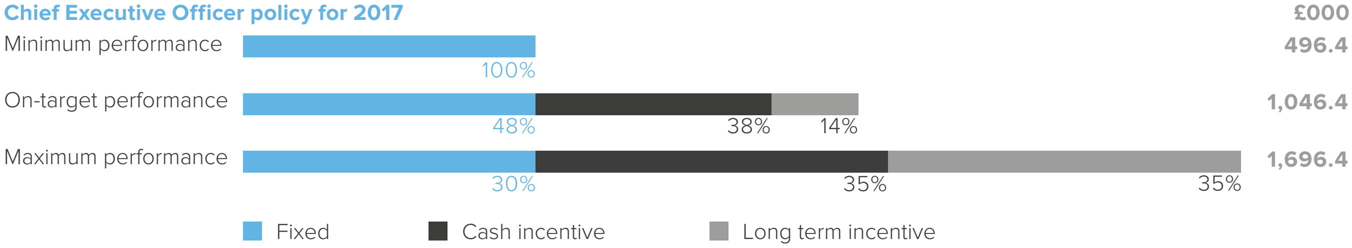
Illustrations of the application of Remuneration Policy in 2017

The following charts show an illustration of the proportion of total remuneration made up of each component of the Remuneration Policy and the value of each component.

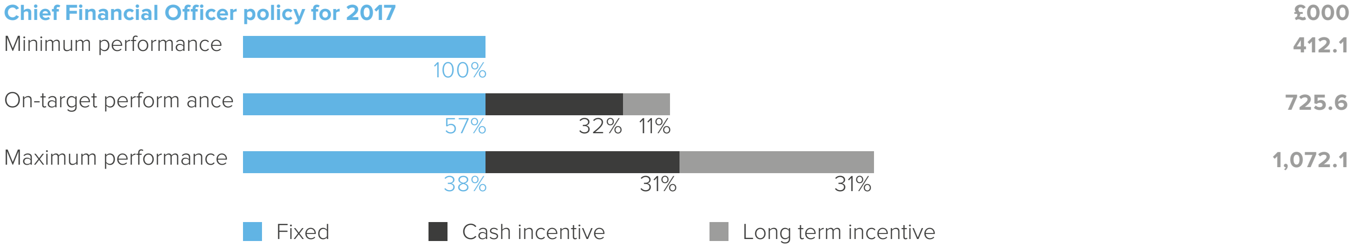
Three scenarios have been illustrated for each executive director:

Minimum performance	• Fixed remuneration (salary, benefits and retirement benefits) • No payment under the Annual Cash Incentive • No vesting under the Spirent Long-term Incentive Plan
On-target performance	• Fixed remuneration (salary, benefits and retirement benefits) • On-target payment under the Annual Cash Incentive (two-thirds of maximum) • 25 per cent vesting under the Spirent Long-term Incentive Plan
Maximum performance	• Fixed remuneration (salary, benefits and retirement benefits) • Maximum payment under the Annual Cash Incentive • Full vesting under the Spirent Long-term Incentive Plan

Chief Executive Officer policy for 2017



Chief Financial Officer policy for 2017



Dilution

The Committee is strongly committed to managing shareholder dilution in a responsible manner. Details of the Company's dilution is set out in the Annual report on remuneration on page 74.

Committee discretion

The Committee has powers delegated by the Board under which it operates. In addition, it complies with rules which have either been approved by shareholders (the long-term incentive plans) or previously by the Committee (annual cash incentives). These rules provide the Committee with certain discretions which serve to ensure that the implementation of the Remuneration Policy is fair both to the individual director and to shareholders, taking overall performance and the position of the Company into account. The Committee also has discretions to set components of remuneration within a range from time to time. The extent of such discretions are set out in the relevant rules or in the maximum opportunity and performance metrics sections of the Policy Table.

The Committee may make adjustments to awards to reflect corporate events, such as a change in the Company's capital structure. The Committee may adjust the calibration of performance measures and vesting outcomes, or substitute or amend any vesting condition (eg due to a significant acquisition or disposal) provided that the resulting condition is appropriate.

The Committee may make minor amendments to the Remuneration Policy to aid its operation or implementation without seeking shareholder approvals (eg for regulatory, exchange control, tax or administrative purposes).

In addition, the Committee requires discretion to deal with genuinely exceptional or unforeseen circumstances. This form of discretion will only be applied in the best interests of the Company and when, in the view of the Committee, it would be disproportionate to seek specific approval from shareholders in general meeting. It is intended that this discretion be used only in the event of changed circumstances or strategy that has not been provided for in the Remuneration Policy.

The Remuneration Committee will not exercise discretion to reward failure and will report on any exercise of discretion that changes the amount of remuneration paid in any year.

The Remuneration Committee can confirm that no discretion was used either during the period or to the date of this Report and in particular that it does not envisage any cash payment being offered which could be construed as a "golden hello".

Signed on behalf of the Board

Tom Maxwell
Chairman, Remuneration Committee
2 March 2017

This section contains additional information which the Directors are required by law and regulation to include within the Annual Report.

This section along with the information from the Board of directors and the Directors' statement on corporate governance on pages 48 to 56 (which are incorporated herein by reference) constitutes the Directors' Report for the purposes of the Companies Act 2006.

Future developments

The Company has chosen, in accordance with the Companies Act 2006 section 414C(II), to include the disclosure of likely future developments in the Strategic Report on pages 1 to 46.

Greenhouse gas emissions and gender diversity

Information on environmental matters and disclosures relating to diversity, gender and human rights are contained in the Sustainability Report on pages 42 to 46.

Results and dividends

The consolidated income statement is on page 96. Loss for the financial year attributable to equity shareholders amounted to $42.3 million.

The directors recommend a final dividend of 2.21 cents per Ordinary share to be paid, subject to shareholder approval, on 5 May 2017. Together with the interim dividend of 1.68 cents per Ordinary share paid on 9 September 2016, this amounts to 3.89 cents for the period. Dividends are detailed on page 119.

Directors

The names of the persons who were directors of the Company during the period under review and as at 2 March 2017 appear on page 52. All the directors are standing for election or re-election at the 2017 AGM, with the exception of Tom Lantzsch, who will be stepping down from the Board on 3 March 2017, and Tom Maxwell and Alex Walker, who will be stepping down from the Board at the conclusion of the AGM.

Appointment of directors

The Company's Articles of Association (the "Articles") give the directors power to appoint and replace directors. Under the terms of reference of the Nomination Committee, an appointment must be recommended by the Nomination Committee for approval by the Board. The Articles require directors to submit themselves for election at the first AGM following their appointment and all directors who held office at the time of the two preceding AGMs to submit themselves for re-election. The Articles notwithstanding, all directors, with the exception of Tom Lantzsch (who will be stepping down from the Board on 3 March 2017) and Tom Maxwell and Alex Walker (who will each be stepping down from the Board at the conclusion of the 2017 AGM) will stand for election or re-election at the AGM this year in compliance with the UK Corporate Governance Code. Details of unexpired terms of directors' service contracts are set out in the Directors' report on remuneration on page 69.

Powers of directors

The directors are responsible for managing the business of the Company and may exercise all the powers of the Company subject to the provisions of relevant statutes, to any directions given by special resolution and to the Company's Articles. Powers relating to the issuing of shares are included in the Articles and such authorities are renewed by shareholders at the AGM each year.

Directors' share interests

Details regarding the share interests of directors and their connected persons in the share capital of the Company, including any interests under long-term incentive plans, are set out in the Directors' report on remuneration on page 70.

Employees

The average number of Group employees during 2016 was 1,599 worldwide (2015 1,754). The Group strives to maintain the following principles:

Equal opportunities

The Group is committed to offering equal opportunities in recruitment, training, career development and promotion to all people, including those with disabilities, having regard for their particular aptitudes and abilities. As a matter of policy, full and fair consideration is given to applicants with disabilities and every effort is made to give employees who become disabled whilst employed by the Group an opportunity for retraining and continuation in employment. It is Group policy that the training, career development and promotion of disabled persons should, as far as possible, be the same as that of other employees.

Health and safety

Health and safety are considered as equal in importance to that of any other function of the Group and its business objectives and the Group is committed to providing a safe and healthy workplace to protect all employees, visitors and the public from foreseeable work hazards.

Harrassment

Sexual, mental or physical harassment in the workplace will not be tolerated. It is expected that incidents of harassment are reported to the appropriate Human Resources director.

Human rights

The Group provides opportunities that promote human rights and dignity every day through the employment created, both directly and indirectly in its global supply chains and through the positive contribution its products make to people's lives. Further details on the Group's approach to human rights can be found in the Sustainability Report on pages 42 to 46.

Communication

Employees are briefed on all relevant matters on a regular basis to achieve a common awareness of all the financial and economic factors affecting the performance of the Group. Information relevant to employees will be provided to them.

Employees are provided with information on the performance of their business unit and their involvement is encouraged in a variety of ways, such as through engagement surveys, "town hall" meetings and management presentations.

The Group encourages an open culture in all its dealings between employees and people with whom it comes into contact. The Group's whistleblowing procedure sets out guidelines for individuals who feel they need to raise issues in confidence with the Company or their own business unit. Every effort is made to protect the confidentiality of those who raise concerns and employees may come forward without fear for their position.

Change of control provisions

The Company does not have agreements with any director or employee that would provide compensation for loss of office or employment resulting from a takeover except that provisions of the Company's share incentive plans may cause outstanding unvested options and awards granted to employees under such plans to vest on a takeover as follows:

Share incentive plan	Change of control provisions in the rules	Effect on vesting	Performance condition
2005 Employee Incentive Plan	Yes	Pro-rated	Still applies
Spirent Long-term Incentive Plan	Yes	Pro-rated	Still applies

The Company is not aware of any significant agreements to which it is party that take effect, alter or terminate upon a change of control of the Company following a takeover.

Substantial shareholdings

In accordance with Listing Rule 9.8.6(2), the Company has been notified of the following significant interests in its Ordinary Shares pursuant to Disclosure Guidance and Transparency Rule 5:

The following notifications have been received during the period 1 January 2016 to 31 December 2016:

	Date of notification	Total holding	% of Company's total voting rights
Ameriprise Financial, Inc	8 February 2016	86,826,707	14.19
Prudential plc	7 December 2016	61,712,760	10.09
AXA Investment Managers SA	18 October 2011	47,515,946	7.77
Standard Life Investments Ltd	27 January 2011	32,370,026	5.29
PrimeStone Capital LLC	13 November 2015	31,215,569	5.10
Neptune Investment Management Ltd	14 September 2016	30,785,265	5.03
Artemis Investment Management Ltd	16 March 2016	30,601,679	5.00
Brandes Investment Partners LP	3 March 2016	30,537,440	4.99
Fidelity International	28 January 2015	29,483,020	4.82
Schroders plc	9 October 2014	26,986,598	4.41
Sun Life Assurance Company of Canada (UK) Ltd	5 December 2008	23,382,347	3.82
Kames Capital	6 February 2012	18,507,514	3.03

No further notifications have been received during the period 1 January 2017 to 2 March 2017.

Share capital

The Company has a single class of share which is divided into Ordinary Shares of 3⅓ pence each. Each Ordinary Share carries one vote and all of the Ordinary Shares rank pari passu. There are no special control rights relating to any of the Ordinary Shares. At the date of this Report, 611.7 million Ordinary Shares of 3⅓ pence each had been issued which are fully paid up and are listed on the London Stock Exchange. The Company also operates a Level 1 American Depositary Receipt ("ADR") programme with each ADR representing four Ordinary Shares. The ADRs trade on the US over-the-counter market and BNY Mellon is the authorised depositary bank for the programme. Further details on share capital are set out in note 29 to the consolidated financial statements and note 13 to the parent Company financial statements. The rights, including those relating to voting, obligations and any restrictions on transfer relating to the Company's Ordinary Shares, as well as the powers of the Company's directors, are set out in the Company's Articles of Association, a copy of which can be found on our website at http://corporate.spirent.com/or can be obtained from Companies House or by writing to the Company Secretary. The Company's Articles of Association may only be amended by a special resolution at a general meeting of shareholders. The most recent changes to the Articles of Association were approved at the 2010 AGM and became effective at the close of that meeting on 5 May 2010.

The Company has established two employee benefit trusts in connection with the operation of the Company's share incentive plans: the Spirent ESOT and the Spirent Sharesave Trust ("SST"). The trustees of both trusts have waived their right to receive dividends on any Ordinary Shares held by them except for a nominal amount of 1 pence other than for those Ordinary Shares held in the ESOT which are the beneficial property of an employee/shareholder. For further details on the employee benefit trusts see "Investment in own Ordinary Shares" in note 29 to the consolidated financial statements and note 13 to the parent Company financial statements. Trustees of both trusts do not vote their Ordinary Shares, except for those Ordinary Shares held in the ESOT that are the beneficial property of an employee/shareholder, which the trustees will vote in accordance with the instructions received from the beneficial owner.

Restrictions on share transfers

There are no restrictions on the transfer of Ordinary Shares in the capital of the Company other than certain restrictions which may from time to time be imposed by law, for example insider trading law. In accordance with the Market Abuse Regulation, certain employees are required to seek the approval of the Company prior to dealing in its securities.

The Company is not aware of any agreements between shareholders that may result in restrictions on the transfer of securities or on voting rights. The Company is also not aware of any contract of significance between itself or any subsidiary undertaking and a controlling shareholder.

Powers for issue of new shares

During the year to 31 December 2016 and to the date of this Report, no new Ordinary Shares have been allotted as a result of the exercise of options and rights pursuant to the Company's share incentive plans.

At each AGM, the directors seek authority to allot shares for cash and to disapply pre-emption rights within prescribed limits. At the 2017 AGM, authority will be sought to allot new Ordinary Shares up to a nominal value of £6,797,132, which is equal to approximately 33.3 per cent of the Company's issued share capital as at 10 March 2017.

Return of capital

The Company was first authorised to repurchase up to 14.99 per cent of its own issued Ordinary Shares, within certain limits and as permitted by the Company's Articles of Association, at the 2006 AGM.

This authority has been renewed at each subsequent AGM, reducing to 9.99 per cent at the 2010 AGM and subsequent AGMs. The authority from the 2016 AGM remains valid until the earlier of the 2017 AGM or 30 June 2017. Since the Company began returning capital to shareholders in May 2006, a total of £270.2 million has been returned, through the repurchase of 397.6 million Ordinary Shares.

No shares were repurchased during 2016 or to the date of this Report.

The Company will seek authority to repurchase up to 9.99 per cent of its own Ordinary Shares at the 2017 AGM to facilitate any further return of capital if the Board concludes that it is in the best interests of shareholders to do so.

Political donations

In accordance with the Group's Ethics Policy, no political donations were made during the year (2015 nil).

Financial risk management

Details of the Group's use of financial instruments, together with information on our risk objectives and policies and our exposure to price, credit, liquidity, cash flow and interest rate risks, can be found in note 27 to the consolidated financial statements.

Going concern

After making appropriate enquiries and taking into account the matters set out in the Principal risks and uncertainties section on pages 24 and 25 of this Annual Report, the directors have a reasonable expectation that the Group has adequate resources to continue in operational existence for the foreseeable future. For this reason, they continue to adopt the going concern basis when preparing the financial statements.

Viability statement

In accordance with provision C.2.2 of the 2014 Code, the directors have assessed the prospects of the Company over a period of three years.

This period was selected for the following reasons:

- the Group's strategic planning cycle covers a three-year period;
- the Board reviews a three-year financial corporate plan; and
- when considering a major investment in product development, three years is considered by the Board to be a reasonable time horizon in which the product should achieve meaningful sales.

The Board's assessment has been made with reference to the Company's current position and prospects, the Group's strategy, the Board's risk appetite and the Group's principal risks and uncertainties as set out on pages 24 and 25 of this Annual Report.

The Board has reviewed plausible and severe stress tests based on the occurrence of a mix of the principal risks to which the Company is exposed, considering the potential impact of these risks on the business model, future performance, solvency and liquidity over the period.

Based on this assessment and the expected successful impact of mitigating actions, the directors have a reasonable expectation that the Company will be able to continue in operation and meet its liabilities as they fall due over the three year period.

Post balance sheet events

No post balance sheet events are required to be disclosed in the consolidated financial statements.

Disclosure of information to Auditor

Each of the directors of the Company at the date of this Report confirms that:

- so far as the director is aware, there is no information needed by the Company's auditor in connection with preparing their Report of which the Company's auditor is unaware; and
- he (she) has taken all the steps that he (she) ought to have taken as a director in order to make himself (herself) aware of any information needed by the Company's auditor in connection with preparing their Report and to establish that the Company's auditor is aware of that information.

Independent Auditor

As described in more detail on page 62 of the Audit Committee report, the Board will be proposing a resolution to re-appoint EY as auditor at the 2017 AGM.

Annual General Meeting

The 2017 AGM will be held at 10.30am on Wednesday 3 May 2017 at Spirent Communications' offices at Aspen Way, Paignton, Devon TQ4 7QR.

By Order of the Board

Angus Iveson
Company Secretary
2 March 2017

Spirent Communications plc
Company number 470893

The directors are responsible for preparing the Annual Report, the Report on directors' remuneration, the consolidated financial statements of the Group and the financial statements of the parent Company.

Company law requires the directors to prepare financial statements for each financial year. Under that law they are required to prepare the consolidated financial statements of the Group in accordance with International Financial Reporting Standards ("IFRSs") as adopted by the European Union ("EU") and have elected to prepare the parent Company financial statements in accordance with UK Generally Accepted Accounting Principles (including FRS101) and applicable law.

The consolidated financial statements of the Group are required by law and IFRSs to present fairly for each financial period the financial position and performance of the Group; the Companies Act 2006 provides, in relation to such financial statements, that references in the relevant part of that Act to financial statements giving a true and fair view, are references to their achieving a fair presentation.

The parent Company financial statements are required by law to give a true and fair view of the state of affairs of the parent Company.

In preparing each of the consolidated financial statements of the Group and parent Company financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- state for the audited consolidated financial statements of the Group whether they have been prepared in accordance with IFRSs as adopted by the EU;
- state for the parent Company financial statements whether applicable UK Accounting Standards have been followed, subject to any material departures disclosed and explained in the parent Company financial statements; and
- prepare the financial statements on a going concern basis unless it is inappropriate to presume the Group and the parent Company will continue in operational business for the foreseeable future.

The directors confirm that they have complied with the above requirements in preparing the financial statements.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Company's transactions and that disclose with reasonable accuracy at any time the financial position of the Group and the parent Company and enable them to ensure that its financial statements comply with the Companies Act 2006 and, for the Group, Article 4 of the International Accounting Standards ("IAS") Regulation. They have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Group and to prevent and detect fraud and other irregularities.

Under applicable law and regulations, the directors are also responsible for preparing a strategic report, a directors' report, a directors' remuneration report and a statement on corporate governance that comply with the law and those regulations. They are also responsible for the maintenance and integrity of the corporate and financial information included on the Company's website.

Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

The directors consider that the Annual Report, taken as a whole, is fair, balanced and understandable and provides the information necessary to assess the Company's performance, business model and strategy.

This Annual Report complies with the Disclosure and Transparency Rules ("DTR") of the Financial Conduct Authority in respect of the requirement to produce an annual financial report.

The Annual Report and consolidated financial statements are the responsibility of, and have been approved by, the directors.

Each of the directors confirms that, to the best of their knowledge:

- the consolidated financial statements of the Group and parent Company financial statements, prepared in accordance with the applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and the profit or loss of the Company and the undertakings included in the consolidation taken as a whole; and
- the Annual Report includes a fair review of the development and performance of the business and the position of the Company and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face.

By order of the Board

Paula Bell
Chief Financial Officer
2 March 2017

Opinion on the financial statements

In our opinion:

- the financial statements give a true and fair view of the state of the Group's and of the Parent Company's affairs as at 31 December 2016 and of the Group's loss for the year then ended;
- the Group financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union;
- the Parent Company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice including FRS 101 "Reduced Disclosure Framework"; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards the Group financial statements, Article 4 of the IAS Regulation.

What we have audited

Spirent Communications plc financial statements comprise:

Group	Parent Company
Consolidated balance sheet as at 31 December 2016	Balance sheet as at 31 December 2016
Consolidated income statement for the year then ended	Statement of changes in equity for the year then ended
Consolidated statement of comprehensive income for the year then ended	Related notes 1 to 17 to the financial statements
Consolidated cash flow statement for the year then ended	
Consolidated statement of changes in equity for the year then ended	
Related notes 1 to 34 to the financial statements	

The financial reporting framework that has been applied in the preparation of the Group financial statements is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union. The financial reporting framework that has been applied in the preparation of the Parent Company financial statements is applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice), including FRS 101 "Reduced Disclosure Framework".

Overview of our audit approach

Risks of material misstatement	• Inappropriate revenue recognition • Recoverability of deferred tax assets • Carrying value of goodwill and investments in subsidiary undertakings (Parent Company only)
Audit scope	• We performed an audit of the complete financial information of four components and audit procedures on specific balances for a further four components. • The components where we performed full or specific audit procedures accounted for 100 per cent of adjusted profit before tax used to calculate materiality and 83 per cent of revenue.
Materiality	• Overall Group materiality of $1.5 million which represents 5 per cent of adjusted profit before tax adjusted for non-recurring items.

Our assessment of risk of material misstatement

We identified the risks of material misstatement described below as those that had the greatest effect on our overall audit strategy, the allocation of resources in the audit and the direction of the efforts of the audit team. In addressing these risks, we have performed the procedures below which were designed in the context of the financial statements as a whole and, consequently, we do not express any opinion on these individual areas.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Inappropriate Revenue Recognition *Refer to the Audit Committee Report (page 58); Accounting policies (page 106); and Note 3 of the Consolidated Financial Statements (page 108).* The Group has reported revenue of $457.9 million (2015 $477.1 million). There is a risk of inappropriate revenue recognition of multi-element contracts comprising of software, hardware and post contract support services which can require separate recognition. The complexity of accounting, as well as the potential pressure on management to meet certain targets, may result in inappropriate recognition of revenue and associated balances. We have performed full and specific scope audit procedures over this risk area in five locations, which covered 83 per cent of Group reported revenue.	For significant revenue streams at each full and specific scope audit location: • We performed walkthroughs of each significant class of revenue transactions and assessed the design effectiveness of key controls; • We have audited large and complex transactions, as applicable, as well as a representative sample of regular transactions at each in scope location during the year. We have agreed revenue recognised to sales contracts focusing on the accounting for the service element of multiple element sales contracts as well as allocation of revenue in contracts with separate components consisting of hardware and subsequent software upgrades. In addition we have obtained sufficient and appropriate audit evidence to ensure that customer acceptance clauses had been met. This included vouching to cash receipt and, where appropriate, ensuring revenue had been deferred correctly at year end; • We have performed journal entry testing over revenue specifically focusing on journal entries close to the year end, manual adjustments to revenue or unusual entries; • We performed detailed testing of deferred revenue and other associated balance sheet accounts to ensure they have been recognised in accordance with Group accounting policies and IFRS; • We performed cut-off testing by tracing a sample of revenue transactions close to the year end to third party delivery note documentation and customer acceptance; • We performed analytical procedures to idenify significant variances which were investigated; • We also considered the adequacy of the Group's disclosures in respect of the accounting policies for revenue recognition in notes 2 and 3 respectively; and • We considered the disclosure in the Annual Report and that management has undertaken a reasonable process to determine that there is no material impact from the implementation of IFRS 15 expected.	We concluded that revenue recognised in the year, and deferred as at 31 December, is materially correct on the basis of our procedures performed both at the Group and by component audit teams.
Recoverability of deferred tax assets *Refer to the Audit Committee Report (page 58); Accounting policies (page 106); and Note 11 of the Consolidated Financial Statements (page 116).* The Group has deferred tax assets of $33.1 million (2015 $25.0 million). There is a risk that inappropriate use of brought forward tax losses and volatility in forecast profit may result in incorrect recognition of deferred tax assets.	We have performed the following procedures over the Group deferred tax assets: • We have engaged EY Tax to perform detailed testing over the recognised deferred tax assets to ensure recognition is in accordance with IFRS; • We reviewed and challenged the future profit forecasts, against current period profitability and historic performance, underlying assumptions and utilisation of unrecognised brought forward losses; and • We challenged the accuracy and appropriateness of related disclosures and offsetting of deferred tax balances in the Group financial statements.	We concluded that deferred tax assets recognised in the year, and deferred tax assets as at 31 December, are materially correct on the basis of our procedures performed by the Group audit team.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Carrying value of goodwill and investments in subsidiary undertakings (Parent Company only) *Refer to the Audit Committee Report (page 58); Accounting policies (page 106); and Note 14 of the Consolidated Financial Statements (page 119)* The Group has goodwill of $155.7 million (2015 $216.9 million) and investments in subsidiary undertakings of £338.7 million (2015 £347.2 million). During 2016, and as a result of changes to the operational activities within the Group driven by the restructuring undertaken, management have reassessed the groups of cash generating units (CGUs) to which goodwill is allocated and monitored. Given the continuing uncertain economic environment and the performance of the business in the year, there is an increased risk that goodwill in the Group financial statements and investments in the Parent Company accounts may be impaired. In addition we focused our audit effort on the DI, DT and Connected Devices CGU due to the goodwill impairment charge of $61.4 million recognised in the current year (2015 impairment charge of $3.8 million). Goodwill was subject to full scope audit procedures by the Group team.	We reviewed the appropriateness of management's methodology for identifying CGUs, associated goodwill and the carrying value allocation to each CGU. We examined the model applied by management to assess the valuation of significant goodwill balances including the underlying key assumptions in relation to revenue growth rate, discount rate and terminal value as well as confirming that the cash flows were consistent with approved budgets. In respect of the CGUs which were impaired we performed detailed testing to critically assess and corroborate the key inputs of the forecast cash flows including: • the discount rate used by obtaining the underlying data used in the calculation and benchmarking it against comparable organisations; • validating the growth rate assumed by comparing them to economic and industry forecasts; • analysing the historical accuracy of budgets to actual results to determine whether forecast cash flows are reliable based on past experience; • utilising EY experts to corroborate management's calculations; • in addition for Connected Devices CGU, we performed sensitivity analyses by testing key assumptions in the model to recalculate a range of potential outcomes in relation to the impairment charge to be recognised in the year. We considered the appropriateness of the related disclosures provided in note 14 to the consolidated financial statements.	We concluded that goodwill and investments in subsidiary undertakings (Parent Company only) as at 31 December 2016 after impairment, is materially correct on the basis of our procedures performed by the Group audit team.

In the prior year, our auditor's report included a risk of material misstatement in relation to the appropriateness of the accounting for restructuring costs as a result of the scale and complexity of the restructuring arrangements. In the current year, this has been re-defined as an area of audit emphasis as the restructuring activity is non-complex and significantly less in value than in the prior year.

The scope of our audit

Tailoring the scope

Our assessment of audit risk, our evaluation of materiality and our allocation of performance materiality determine our audit scope for each entity within the Group. Taken together, this enables us to form an opinion on the consolidated financial statements. We take into account size, risk profile, the organisation of the group and effectiveness of group-wide controls, changes in the business environment and other factors when assessing the level of work to be performed at each entity.

In assessing the risk of material misstatement to the Group financial statements, and to ensure we had adequate quantitative coverage of significant accounts in the financial statements, of the reporting components of the Group, we selected components covering entities within the United Kingdom, North America and Asia which represent the principal business units within the Group.

Of the eight components selected, we performed an audit of the complete financial information of four components ("full scope components") which were selected based on their size or risk characteristics. For the remaining four components ("specific scope components"), we performed audit procedures on specific accounts within that component that we considered had the potential for the greatest impact on the significant accounts in the financial statements either because of the size of these accounts or their risk profile.

For the current year, the full scope components contributed 51 per cent (2015 57 per cent) of the Group's revenue. For the current year, the specific scope components contributed 32 per cent (2015 29 per cent) of the Group's revenue. The audit scope of specific components may not have included testing of all significant accounts of the component, but will have contributed to the coverage of significant accounts tested for the Group. The coverage obtained in relation to individual expense accounts ranged from 73 per cent to 100 per cent of the total individual expense amounts. The coverage obtained in relation to individual balance sheet accounts ranged from 78 per cent to 100 per cent of the total individual balance sheet amounts. The Group audit risk in relation to inappropriate revenue recognition was subject to audit procedures at each of the full and specific scope locations with revenue. The Group audit risk in relation to the carrying value of goodwill and investments in subsidiaries (Parent Company only) and recoverability of deferred tax assets was subject to audit procedures by the Group audit team on the entire balance. For the current year, the full scope components contributed 78 per cent (2015 43 per cent) of the Group's profit before tax adjusted for non-recurring items measure used to calculate materiality. For the current year, the specific scope components contributed 22 per cent (2015 21 per cent) of the Group's profit before tax adjusted for non-recurring items measure used to calculate materiality. The profit before tax adjusted for non-recurring items coverage in the current year has been impacted by an increase in loss making consolidation entities in the year.

Of the remaining components we performed specified procedures in one additional component which accounted for 25 per cent of the Group's profit before tax adjusted for non-recurring items. For all remaining components, we performed other procedures, including analytical review procedures and testing of consolidation journals, intercompany eliminations and foreign currency translation recalculations and enquiring with local management to respond to any potential risks of material misstatement to the Group financial statements.

Involvement with component teams

In establishing our overall approach to the Group audit, we determined the type of work that needed to be undertaken at each of the components by us, as the Group audit engagement team, or by component auditors from other EY global network firms operating under our instruction. Of the full scope components, audit procedures were performed on one of these directly by the Group audit team and three by component audit team. For two of the four specific scope components the work was performed by component auditors. We determined the appropriate level of involvement to enable us to determine that sufficient audit evidence had been obtained as a basis for our opinion on the Group as a whole.

At the start of the audit, a Global Team Planning event was held in the UK with representatives from all full and specific scope component audit teams in attendance. Detailed instructions were sent to all auditors in these locations. These instructions covered the significant areas that should be addressed by the component team auditors (which included the relative risks of material misstatement detailed above) and set out the information to be reported back to the Group audit team. In addition, the Group audit team continued to follow a programme of planned visits that has been designed to ensure that the Senior Statutory Auditor visits certain material or high risk locations on a rotational basis. During the current year's audit cycle, visits were undertaken by the Group audit team to the component teams in Asia and North America. These visits involved meeting with our component team to discuss and direct their planned audit approach, holding meetings with local management and reviewing interim procedures performed to date on the Group risk areas.

The Group team interacted regularly with the component teams where appropriate during various stages of the audit including attendance at all close meetings by phone, review of key working papers and were responsible for the scope and direction of the audit process. This, together with the additional procedures performed at Group level, gave us appropriate evidence for our opinion on the Group financial statements.

Materiality

The magnitude of an omission or misstatement that, individually or in aggregate, could reasonably be expected to influence the economic decisions of the users of the financial statements. Materiality provides a basis for determining the nature and extent of our audit procedures.

We determined materiality for the Group to be $1.5 million (2015 $1.31 million), which is 5 per cent (2015 5 per cent) of profit before tax adjusted for non-recurring items. We believe that profit before tax adjusted for non-recurring items provides us with a consistent year on year basis for determining materiality and is the most relevant performance measure to the stakeholders of the entity. Detailed audit procedures are performed on material non-recurring items.

During the course of our audit, we reassessed initial materiality and the only change in final materiality was to reflect the actual reported performance of the Group in the year.

Starting basis	• Loss before tax – $46.0 million
Adjustments	• Adjusted for non-recurring items: – Restructuring costs of $4.8 million – Goodwill, intangible asset and investment in share of associate impairment of $71.7 million
Materiality	• Profit before tax adjusted for non-recurring items $30.5 million (basis for materiality) • Materiality of $1.5 million (5 per cent of materiality basis)

During the course of our audit, we reassessed initial materiality and the only change in final materiality was to reflect the actual reported performance of the Group in the year.

Performance materiality

The application of materiality at the individual account or balance level. It is set at an amount to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality.

On the basis of our risk assessments, together with our assessment of the Group's overall control environment, our judgement was that performance materiality was 75 per cent (2015 75 per cent) of our planning materiality, namely $1.1 million (2015 $1.0 million). We have set performance materiality at this percentage to ensure that total detected and undetected audit differences do not exceed our planning materiality of $1.5 million for the financial statements as a whole.

Audit work at component locations for the purpose of obtaining audit coverage over significant financial statement accounts is undertaken based on a percentage of total performance materiality. The performance materiality set for each component is based on the relative scale and risk of the component to the Group as a whole and our assessment of the risk of misstatement at that component. In the current year, the range of performance materiality allocated to full and specific scope components was $0.2 million to $0.9 million (2015 $0.2 million to $0.9 million).

Reporting threshold

An amount below which identified misstatements are considered as being clearly trivial.

We agreed with the Audit Committee that we would report to them all uncorrected audit differences in excess of $0.08 million (2015 $0.07 million), which is set at 5 per cent of planning materiality, as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds.

We evaluate any uncorrected misstatements against both the quantitative measures of materiality discussed above and in light of other relevant qualitative considerations in forming our opinion.

Scope of the audit of the financial statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the Group's and the Parent Company's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the directors; and the overall presentation of the financial statements.

In addition, we read all the financial and non-financial information in the Annual Report 2016 to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

Respective responsibilities of directors and auditor

As explained more fully in the Directors' Responsibilities Statement set out on page 88, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

This report is made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Opinion on other matters prescribed by the Companies Act 2006

In our opinion:

- the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006; and
- based on the work undertaken in the course of the audit:
  - the information given in the Strategic Report and the Directors' Report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
  - the Strategic Report and the Directors' Report have been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception

ISAs (UK and Ireland) reporting	We are required to report to you if, in our opinion, financial and non-financial information in the annual report is: • Materially inconsistent with the information in the audited financial statements; or • Apparently materially incorrect based on, or materially inconsistent with, our knowledge of the Group acquired in the course of performing our audit; or • Otherwise misleading. In particular, we are required to report whether we have identified any inconsistencies between our knowledge acquired in the course of performing the audit and the Directors' Statement that they consider the Annual Report and accounts taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the entity's performance, business model and strategy; and whether the Annual Report appropriately addresses those matters that we communicated to the Audit Committee that we consider should have been disclosed.	We have no exceptions to report.
Companies Act 2006 reporting	In light of the knowledge and understanding of the Company and its environment obtained in the course of the audit, we have identified no material misstatements in the Strategic Report or Directors' Report. We are required to report to you if, in our opinion: • Adequate accounting records have not been kept by the Parent Company, or returns adequate for our audit have not been received from branches not visited by us; or • The Parent Company financial statements and the part of the Directors' Remuneration Report to be audited are not in agreement with the accounting records and returns; or • Certain disclosures of directors' remuneration specified by law are not made; or • We have not received all the information and explanations we require for our audit.	We have no exceptions to report.
Listing Rules review requirements	We are required to review: • The Directors' Statement in relation to going concern, set out on page 88, and longer-term viability, set out on page 87; and • The part of the Corporate Governance Statement relating to the Company's compliance with the provisions of the UK Corporate Governance Code specified for our review.	We have no exceptions to report.

Statement on the Directors' Assessment of the Principal Risks that Would Threaten the Solvency or Liquidity of the Entity

ISAs (UK and Ireland) reporting	We are required to give a statement as to whether we have anything material to add or to draw attention to in relation to: • The directors' confirmation in the Annual Report that they have carried out a robust assessment of the principal risks facing the entity, including those that would threaten its business model, future performance, solvency or liquidity; • The disclosures in the Annual Report that describe those risks and explain how they are being managed or mitigated; • The Directors' Statement in the financial statements about whether they considered it appropriate to adopt the going concern basis of accounting in preparing them, and their identification of any material uncertainties to the entity's ability to continue to do so over a period of at least twelve months from the date of approval of the financial statements; and • The directors' explanation in the Annual Report as to how they have assessed the prospects of the entity, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the entity will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.	We have nothing material to add or to draw attention to.

Joe Yglesia
(Senior Statutory Auditor)
For and on behalf of Ernst & Young LLP, Statutory Auditor
Reading
2 March 2017

Notes
1 The maintenance and integrity of the Spirent Communications plc website is the responsibility of the directors; the work carried out by the auditors does not involve consideration of these matters and, accordingly, the auditors accept no responsibility for any changes that may have occurred to the financial statements since they were initially presented on the website.
2 Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

CONSOLIDATED INCOME STATEMENT

Year to 31 December 2016

		Year ended 31 December 2016			Year ended 31 December 2015		
	Notes	Adjusted $ million	Adjusting items[1] $ million	Reported $ million	Adjusted $ million	Adjusting items[1] $ million	Reported $ million
Continuing operations							
Revenue	3, 4	457.9	–	457.9	477.1	–	477.1
Cost of sales		(133.6)	–	(133.6)	(145.3)	–	(145.3)
Gross profit		324.3	–	324.3	331.8	–	331.8
Product development	4	(111.7)	–	(111.7)	(118.3)	–	(118.3)
Selling and distribution		(125.4)	–	(125.4)	(127.2)	–	(127.2)
Administration		(40.7)	–	(40.7)	(44.2)	–	(44.2)
Other items		-	(87.6)	(87.6)	–	(32.0)	(32.0)
Operating profit/(loss)		46.5	(87.6)	(41.1)	42.1	(32.0)	10.1
Other items charged in arriving at operating profit/(loss):							
Exceptional items	6	–	(4.8)	(4.8)	–	(12.5)	(12.5)
Acquisition related costs		–	–	–	–	(0.1)	(0.1)
Acquired intangible asset amortisation and impairment		–	(20.6)	(20.6)	–	(14.8)	(14.8)
Goodwill impairment	14	–	(61.4)	(61.4)	–	(3.8)	(3.8)
Share-based payment	31	–	(0.8)	(0.8)	–	(0.8)	(0.8)
Finance income	7	0.3	–	0.3	0.4	–	0.4
Finance costs	8	(0.7)	–	(0.7)	(0.5)	–	(0.5)
Share of loss of associate	16	(1.9)	(2.6)	(4.5)	(0.4)	–	(0.4)
Profit/(loss) before tax	6, 5	44.2	(90.2)	(46.0)	41.6	(32.0)	9.6
Tax	11	(11.9)	15.6	3.7	(10.9)	14.8	3.9
Profit/(loss) for the year		32.3	(74.6)	(42.3)	30.7	(17.2)	13.5
Attributable to:							
Owners of the parent Company		32.3	(74.6)	(42.3)	30.5	(17.2)	13.3
Non–controlling interest		–	–	–	0.2	–	0.2
Profit/(loss) for the year		32.3	(74.6)	(42.3)	30.7	(17.2)	13.5
Earnings/(loss) per share							
Basic	12	5.29		(6.93)	5.00		2.18
Diluted		5.29		(6.93)	4.98		2.17

Note

1 Adjusting items comprises exceptional items, acquisition related costs, amortisation and impairment of acquired intangible assets, goodwill impairment, share-based payment, impairment of associate, tax on adjusting items and prior year tax.

The notes on pages 101 to 135 and pages 151 and 152 form part of these financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

Year to 31 December 2016

	Notes	2016 $ million	2015 $ million
(Loss)/profit for the year		**(42.3)**	13.5
Other comprehensive income			
Items that may subsequently be reclassified to profit or loss:			
Exchange differences on retranslation of foreign operations		**(2.9)**	(5.9)
Items that will not subsequently be reclassified to profit or loss:			
Re-measurement of the net defined benefit pension liability	10	**(2.2)**	(9.2)
Income tax effect	11	**0.4**	1.8
		(1.8)	(7.4)
Other comprehensive income		**(4.7)**	(13.3)
Total comprehensive income for the year		**(47.0)**	0.2
Attributable to:			
Owners of the parent Company		**(47.0)**	–
Non-controlling interest		**–**	0.2
Total comprehensive income for the year		**(47.0)**	0.2

The notes on pages 101 to 135 and pages 151 and 152 form part of these financial statements.

Strategic Report

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CONSOLIDATED BALANCE SHEET

Year to 31 December 2016

	Notes	2016 $ million	2015 $ million
Assets			
Non-current assets			
Intangible assets	14	**169.8**	251.6
Property, plant and equipment	15	**47.3**	51.1
Trade and other receivables	20	**4.6**	4.3
Investment in associate	16	**–**	4.6
Cash on deposit	21	**0.1**	0.1
Defined benefit pension plan surplus	10	**0.9**	1.2
Deferred tax asset	23	**33.1**	25.6
		255.8	338.5
Current assets			
Inventories	19	**27.4**	22.9
Trade and other receivables	20	**128.9**	128.0
Current tax asset		**0.4**	0.6
Cash and cash equivalents	21	**96.1**	102.0
		252.8	253.5
Total assets		**508.6**	592.0
Liabilities			
Current liabilities			
Trade and other payables	22	**(127.2)**	(123.4)
Other financial liabilities	22	**(0.1)**	–
Current tax liability		**(1.5)**	(0.8)
Provisions	26	**(4.2)**	(8.9)
		(133.0)	(133.1)
Non-current liabilities			
Trade and other payables	24	**(16.9)**	(20.2)
Other financial liabilities	25	**–**	(2.6)
Deferred tax liability	23	**(0.1)**	(0.6)
Defined benefit pension plan deficit	10	**(14.4)**	(21.0)
Provisions	26	**(2.6)**	(2.4)
		(34.0)	(46.8)
Total liabilities		**(167.0)**	(179.9)
Net assets		**341.6**	412.1
Capital and reserves	29		
Share capital		**25.3**	30.2
Share premium account		**25.0**	29.9
Capital redemption reserve		**16.3**	19.5
Other reserves		**19.4**	6.4
Translation reserve		**10.3**	13.2
Retained earnings		**245.3**	312.6
Total equity attributable to owners of the parent Company		**341.6**	411.8
Non-controlling interest		**–**	0.3
Total equity		**341.6**	412.1

The notes on pages 101 to 135 and pages 151 and 152 form part of these financial statements.

Signed on behalf of the Board

Paula Bell
Director
2 March 2017

CONSOLIDATED CASH FLOW STATEMENT

Year to 31 December 2016

	Notes	2016 $ million	2015 $ million
Cash flows from operating activities			
Cash flow from operations	32	**47.4**	57.8
Tax (paid)/received		**(4.7)**	2.6
Net cash inflow from operating activities		**42.7**	60.4
Cash flows from investing activities			
Interest received		**0.3**	0.4
Transfer to long-term deposit		**–**	(0.1)
Purchase of intangible assets	14	**(1.1)**	(0.9)
Purchase of property, plant and equipment		**(17.5)**	(25.9)
Proceeds from the sale of property, plant and equipment		**1.5**	1.3
Investment in associate	16	**–**	(5.0)
Acquisition of subsidiaries and businesses net of cash acquired	33	**(0.1)**	(1.7)
Net cash used in investing activities		**(16.9)**	(31.9)
Cash flows from financing activities			
Dividend paid	13	**(24.2)**	(23.5)
Employee Share Ownership Trust		**–**	0.1
Acquisition of non–controlling interest		**(2.6)**	–
Net cash used in financing activities		**(26.8)**	(23.4)
Net (decrease)/increase in cash and cash equivalents		**(1.0)**	5.1
Cash and cash equivalents at the beginning of the year		**102.0**	99.8
Effect of foreign exchange rate changes		**(4.9)**	(2.9)
Cash and cash equivalents at the end of the year	21	**96.1**	102.0

The notes on pages 101 to 135 and pages 151 and 152 form part of these financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

		Attributable to the equity holders of the parent Company								$ million
	Notes	Share capital	Share premium account	Capital redemption reserve	Other reserves	Translation reserve	Retained earnings	Total	Non-controlling interest	Total equity
At 1 January 2015		31.8	31.5	20.6	2.1	19.1	329.2	434.3	0.1	434.4
Profit for the year		–	–	–	–	–	13.3	13.3	0.2	13.5
Other comprehensive income[a]		–	–	–	–	(5.9)	(7.4)	(13.3)	–	(13.3)
Total comprehensive income		–	–	–	–	(5.9)	5.9	–	0.2	0.2
Share-based payment	31	–	–	–	–	–	0.8	0.8	–	0.8
Tax credit on share incentives	11	–	–	–	–	–	0.1	0.1	–	0.1
Employee Share Ownership Trust	29	–	–	–	–	–	0.1	0.1	–	0.1
Equity dividends	13	–	–	–	–	–	(23.5)	(23.5)	–	(23.5)
Exchange adjustment		(1.6)	(1.6)	(1.1)	4.3	–	–	–	–	–
At 1 January 2016		**30.2**	**29.9**	**19.5**	**6.4**	**13.2**	**312.6**	**411.8**	**0.3**	**412.1**
Loss for the year		–	–	–	–	–	(42.3)	(42.3)	–	(42.3)
Other comprehensive income[b]		–	–	–	–	(2.9)	(1.8)	(4.7)	–	(4.7)
Total comprehensive income		–	–	–	–	(2.9)	(44.1)	(47.0)	–	(47.0)
Share-based payment	31	–	–	–	–	–	0.8	0.8	–	0.8
Tax charge on share incentives	11	–	–	–	–	–	(0.1)	(0.1)	–	(0.1)
Acquisition of non-controlling interest		–	–	–	–	–	0.3	0.3	(0.3)	–
Equity dividends	13	–	–	–	–	–	(24.2)	(24.2)	–	(24.2)
Exchange adjustment		(4.9)	(4.9)	(3.2)	13.0	–	–	–	–	–
At 31 December 2016		**25.3**	**25.0**	**16.3**	**19.4**	**10.3**	**245.3**	**341.6**	–	**341.6**

Notes

(a) The amount included in other comprehensive income for 2015 of $7.4 million represents re-measurement losses of the net defined benefit pension liability of $9.2 million net of a tax credit of $1.8 million. The amount included in the translation reserve of $5.9 million represents other comprehensive income related to the translation of foreign operations.

(b) The amount included in other comprehensive income for 2016 of $1.8 million represents re-measurement losses of the net defined pension liability of $2.2 million net of a tax credit of $0.4 million. The amount included in the translation reserve of $2.9 million represents other comprehensive income related to the translation of foreign operations.

The notes on pages 101 to 135 and pages 151 and 152 form part of these financial statements.

1. Corporate information

The Group's consolidated financial statements for the year ended 31 December 2016 were authorised for issue by the Board of directors on 2 March 2017. Spirent Communications plc is a public limited company incorporated and domiciled in England and Wales (registration number 00470893). The registered address of the Company is Northwood Park, Gatwick Road, Crawley, West Sussex, RH10 9XN, United Kingdom.

The Company's Ordinary Shares are traded on the London Stock Exchange.

As required by the European Union's ("EU") IAS Regulation and the Companies Act 2006, the Group has prepared its consolidated financial statements in accordance with International Financial Reporting Standards ("IFRSs") as adopted by the EU and issued by the International Accounting Standards Board ("IASB").

The Company has elected to prepare the Company financial statements in accordance with UK Accounting Standards. These are presented on pages 136 to 137 and the accounting policies in respect of the Company are set out on pages 138 to 142.

2. Significant accounting policies

Accounting convention

The consolidated financial statements are prepared on a historical cost basis apart from certain financial instruments that have been measured at fair value.

Going concern basis of accounting

At 31 December 2016 the Group had cash balances of $96.1 million and no debt.

The directors have reviewed the detailed financial projections for a period of 12 months from the date of this report and the business plans for the 2018 and 2019 financial years. They have also considered the principal risks and uncertainties that the Group faces and its current financial position and are satisfied that the Group has adequate financial resources to continue in operational existence for the foreseeable future, a period of not less than 12 months from the date of this report. Accordingly, the going concern basis of accounting continues to be used in the preparation of the financial statements.

New accounting standards

No new standards, amendments to standards and interpretations have been applied by the Group which have resulted in a significant impact on its consolidated results or financial position.

In 2016 there are significant adjusting items in the income statement. Consequently, the layout of the consolidated income statement has been altered to a columnar approach to enable the user to better understand the adjustments and the underlying performance of the Group. The comparative information has been presented on the same basis. There is no overall impact to reported profit.

Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Company and its subsidiaries made up to 31 December each year. The financial statements of subsidiaries are prepared for the same reporting year as the parent Company, using consistent accounting policies. Full list of subsidiary undertakings is provided on pages 151 and 152.

Subsidiary undertakings are entities that are directly or indirectly controlled by the Group. The Group controls an entity when it is exposed, or has rights to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

Results of subsidiaries are consolidated from the date on which control is transferred to the Group and cease to be consolidated from the date on which control is transferred out of the Group.

The separable net assets, including intangible assets of newly acquired subsidiaries, are incorporated into the consolidated financial statements based on their fair values at the effective date of control.

Associates are those entities in which the Group has significant influence, but not control, over the financial and operating policies. Significant influence is presumed to exist when the Group holds between 20 and 50 per cent of the voting power of another entity.

Associates are accounted for using the equity method and are initially recognised at cost. The Group's investment includes goodwill identified on acquisition, net of any accumulated impairment losses. The consolidated financial statements include the Group's share of the total comprehensive income from the date that significant influence commences until the date that significant influence ceases. When the Group's share of losses exceeds its interest in an equity accounted investee, the Group's carrying amount is reduced to nil and recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of an associate.

Dividends received from associates reduce the carrying value of the associate. Investments in associates are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount.

All intra-Group transactions, balances, income and expenses are eliminated on consolidation.

2. Significant accounting policies continued

Business combinations and goodwill

A business combination is a transaction or other event in which an acquirer obtains control of one or more businesses. Business combinations are accounted for using the acquisition method.

At acquisition date the identifiable assets acquired and liabilities assumed, including intangible assets, are measured at their fair values. The cost of an acquisition is measured as the aggregate of the consideration transferred and the amount of any non-controlling interest in the acquiree. Non-controlling interests are measured at the proportionate share of the acquiree's identifiable net assets.

Contingent consideration resulting from business combinations is valued at fair value at the acquisition date as part of the business combination. When the contingent consideration meets the definition of a financial liability, it is subsequently re-measured to fair value at each reporting date, with changes in fair value recognised in profit or loss. The determination of fair value is based on discounted cash flows. The key assumptions take into consideration the probability of meeting each performance target and the discount rate.

Acquisition costs are expensed and included in administration costs.

Goodwill arising on the acquisition of subsidiaries, representing the excess of cost over the net fair value of the net assets acquired, is capitalised as an intangible asset. Goodwill is carried at cost less any accumulated impairment losses.

Goodwill is subject to an annual review for impairment. For the purpose of impairment testing, goodwill is allocated to the related cash-generating units monitored by management. Where the recoverable amount of the cash-generating unit is less than its carrying amount, including goodwill, an impairment loss is recognised in the income statement.

Intangible assets

Intangible assets are carried at cost less accumulated amortisation and accumulated impairment losses. Separately identifiable intangible assets such as patent fees, licence fees, trademarks and customer lists and relationships are capitalised on the balance sheet only when the value can be measured reliably, or the intangible asset is purchased as part of the acquisition of a business. Such intangible assets are amortised over their useful economic lives on a straight line basis. The carrying value of intangible assets is reviewed for impairment if events or changes in circumstances indicate the carrying value may not be recoverable.

Acquired intangible assets, being customer lists, current technology, database, brand names and a non-compete covenant, are amortised on a straight line basis over their estimated useful lives and the charge is included within other items in the income statement. Licences are amortised over their useful lives or term, and are expensed within cost of sales or selling costs.

The estimated useful lives of intangible assets and the amortisation expiry dates are as follows:

	Useful life	Expiry date
Customer lists	2 to 7 years	2020
Current technology	5 to 7 years	2021
Database	2.5 to 7 years	2016
Brand names	5 years	2020
Non-compete covenant	4 years	2016
Licences	3 to 5 years	2018

Product development

Research expenditure is recognised in the year in which it is incurred. Intangible assets arising on the Group's various product development projects are recognised only if the recognition criteria of IAS 38 "Intangible Assets" are met.

Product development costs are expensed as incurred until the technological feasibility of the product under development has been established. Technological feasibility in Spirent's circumstances occurs when a working model is completed. For software development technological feasibility is not established until the process of developing the software is complete. After technological feasibility is established, additional costs are capitalised and amortised on a straight line basis over the estimated useful life.

At 31 December 2016 and 31 December 2015 no amounts have met the recognition criteria.

2. Significant accounting policies continued

Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation and accumulated impairment. Depreciation is not provided on freehold land. Depreciation is provided to write-off the cost, less estimated residual value, of all other assets over their estimated useful lives on a straight line basis at rates which take into account commercial conditions at their location. Usual asset lives are as follows:

Freehold buildings	50 years
Plant and machinery	3 to 8 years
Fixtures, fittings and equipment	
Building installations	20 years or lease period if less
Fittings and equipment	3 to 8 years
Motor vehicles	3 to 5 years
Business systems software	4 years

The carrying values of property, plant and equipment are reviewed for impairment if events or changes in circumstances indicate the carrying value may not be recoverable.

Impairment of assets

Intangible assets with finite useful lives and property, plant and equipment are tested for impairment at each reporting date where there is an indication that an asset may be impaired. Goodwill and intangible assets with an indefinite useful life are assessed at least annually. When an impairment test is performed, the recoverable amount is assessed by reference to the higher of the net present value of the expected cash flows (value in use) of the relevant cash-generating unit or asset and the fair value less cost of disposal. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Where the carrying amount of an asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. Impairment losses are recognised in the income statement in those expense categories consistent with the function of the impaired asset.

Where an impairment loss has been recognised against an asset, it may be reversed in future periods where there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised, but only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, had no impairment loss been recognised in prior years. Such a reversal is recognised in the income statement. This does not apply for goodwill, for which an impairment loss must not be reversed in any circumstances.

Leases

Operating leases are leases where the lessor retains substantially all the risks and rewards of ownership of the asset and are not finance leases. Operating lease rentals are charged to the income statement on a straight line basis over the period of the lease.

Inventories

Inventories are stated at the lower of cost and estimated net realisable value, after provisions for obsolescence. Cost includes all costs incurred in bringing each product to its present location and condition, being the full manufacturing cost on a first-in-first-out basis, including all attributable overheads based on a normal level of activity.

Provisions

Provisions are recorded when the Group has a present, legal or constructive obligation as a result of a past event, for which it is probable that the Group will be required to settle by an outflow of resources and for which a reliable estimate of the amount of the obligation can be made. Provisions are reviewed at each balance sheet date and adjusted to reflect the current best estimate.

Where the effect of the time value of money is material, the amount of the provision shall be the present value of the expenditures expected to be required to settle the obligation.

Foreign currencies

The consolidated financial statements are presented in US dollars, which is the Group's presentation currency.

Transactions in foreign currencies are initially recorded at the rates ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the rates ruling at the balance sheet date. All exchange differences are taken to the consolidated income statement. Non-monetary assets and liabilities denominated in foreign currencies are measured in terms of historical costs using the exchange rate at the date of the initial transaction.

The functional currencies of the Group's operations are principally US dollar, sterling or euro. On consolidation the assets and liabilities of the Group's foreign operations are translated into the Group's presentation currency at exchange rates ruling at the balance sheet date. The results of foreign operations are translated into US dollars using average rates for the period. The exchange differences arising on retranslation are classified as a separate component of equity, the translation reserve. Such translation differences are recognised as part of the profit or loss on disposal should an operation be disposed of. The Group has elected to apply the exemption in IFRS 1 "First Time Adoption of International Financial Reporting Standards" which allows the cumulative translation differences for all foreign operations to be deemed to be zero at the date of transition to IFRSs, being 1 January 2003.

2. Significant accounting policies continued

Financial instruments

Financial assets and liabilities are recognised on the Group's balance sheet when it becomes a party to the contractual provisions of the instrument.

Trade receivables

Trade receivables are non-interest bearing and are stated at original invoiced amount less an appropriate allowance for estimated irrecoverable amounts. Such allowances are based on an assessment of debtor ageing, past experience or known customer exposures.

Cash and cash equivalents

Cash and cash equivalents in the balance sheet comprise cash at bank and in hand and short-term deposits which usually have an original maturity of three months or less. For the purposes of the consolidated cash flow statement, cash and cash equivalents consist of cash and cash equivalents as defined above. There are no bank overdrafts.

Trade payables

Trade payables are non-interest bearing and are stated at the original invoiced amount.

Equity instruments

Equity instruments are recorded at the proceeds received, net of direct issue costs. Spirent Communications plc Ordinary Shares held by the Group are classified in equity as treasury shares and are recognised at cost and included as a deduction from retained earnings. Consideration received for the sale of such treasury shares is also recognised in equity.

Derivative financial instruments and hedge accounting

The Group uses forward foreign currency exchange contracts to manage exposures arising on receipts and payments in foreign currencies relating to firm commitments.

Forward foreign currency exchange contracts are initially recognised at fair value on the date on which the contract is entered into, and are subsequently re-measured to fair value at each reported balance sheet date. The fair value of forward foreign currency exchange contracts is calculated by reference to current forward exchange rates for contracts with similar maturity profiles. The Group has not adopted the hedge accounting rules. Consequently all gains and losses arising from changes in fair value are taken to the income statement.

Derivatives embedded in other financial instruments or other host contracts are treated as separate derivatives when their risks and characteristics are not closely related to those of the host contracts.

Retirement benefits

The Group operates two funded defined benefit pension plans which are in the United Kingdom, all other pension plans are defined contribution in nature. For the defined contribution plans the amount charged to the income statement is the employers' contributions paid or payable during the year.

For defined benefit pension plans full actuarial valuations are carried out every three years using the projected unit credit method, and updates are performed at each balance sheet date. Re-measurement, comprising actuarial gains and losses, the effect of changes to the asset ceiling (if relevant) and the return on plan assets (excluding interest), is reflected immediately in the balance sheet liability or asset with a charge or credit recognised in other comprehensive income in the period in which they occur. Re-measurement recognised in other comprehensive income will not be reclassified to profit or loss. Past service cost is recognised in profit or loss in the period of plan amendment. Net interest is calculated by applying the discount rate at the beginning of the period to the net defined benefit pension liability or asset, taking account of any changes in the net defined benefit pension liability during the period as a result of contribution and benefit payments. Defined benefit pension costs are categorised as:

- service cost (including current service cost, past service cost and gains and losses on curtailments or settlements);
- net interest expense or income; and
- re-measurement.

The Group presents the first two components of defined benefit pension costs in profit or loss.

Revenue recognition

Revenue is recognised when it is probable that economic benefits will flow to the Group, the revenue can be reliably measured and when the Group has transferred to the buyer the significant risks and rewards of ownership. In addition, revenue is only recognised when collectability is probable.

For the sale of services, revenue is recognised in accounting periods in which the service is rendered. Revenue from maintenance contracts is recognised over the period of performance on a straight line basis.

2. Significant accounting policies continued

Revenue from product sales of hardware and software is recognised at the time of delivery and acceptance and when there are no significant vendor obligations remaining. It is not until acceptance has occurred that the risks and rewards of ownership are transferred to the buyer. Terms of acceptance are dependent upon the specific contractual arrangement agreed with the customer.

Revenue from sales or usage-based royalties is recognised as the subsequent sale or usage occurs.

Contractual arrangements are accounted for as two or more separate transactions only where the commercial substance is that the individual components operate independently of each other, because they are capable of being provided separately from one another and it is possible to attribute reliable fair values to every component. To the extent that a separate component comprises a product sale of hardware or software, revenue is recognised as described above. Revenue is recognised on other components as the Group fulfils its contractual obligations and to the extent that it has earned the right to consideration.

Government grants

A government grant is recognised in the balance sheet initially as deferred income when there is reasonable assurance that it will be received and that the Group will comply with the conditions attached to it. Grants that compensate the Group for expenses incurred are recognised as other operating income on a systematic basis in the same periods in which expenses are incurred. Grants that compensate the Group for the acquisition of an asset are presented by deducting them from the acquisition cost of the related asset in accordance with IAS 20.

Employee benefits

When an employee has rendered services to the Group during an accounting period, short-term benefits expected to be paid in exchange for those services are recognised in the same accounting period.

Share-based payment

The Group operates various equity-settled share-based compensation plans and accounts for these awards in accordance with IFRS 2.

The fair value of these awards is recognised in the income statement on a straight line basis over the vesting period together with a corresponding change in equity. The fair value is measured using the Hull-White trinomial model by reference to the share price, and taking into account the terms and conditions of the award, excluding non-market vesting conditions, at the date the awards were granted. The charge is reassessed at each balance sheet date to reflect the expected and actual levels of vesting, due to achievement or otherwise of non-market conditions. Awards where vesting is conditional upon satisfying a market condition or non-vesting condition are treated as vesting irrespective of whether the market or non-vesting condition has been satisfied.

The Group has an employee share trust for the granting of certain share incentives to employees. Shares in the Group held by the employee share trust are treated as treasury shares and presented in the balance sheet as a deduction from equity.

Tax

Income tax on the profit or loss for the year comprises current and deferred tax. Income tax is recognised in the income statement except to the extent that it relates to items in other comprehensive income or equity.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the balance sheet date, and any adjustments to tax payable for previous years.

Deferred tax is recognised on all temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements, with the following exceptions:

- where the temporary difference arises from the initial recognition of goodwill (taxable temporary differences only) or of an asset or liability in a transaction that is not a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss;
- in respect of taxable temporary differences associated with investments in subsidiaries, associates and joint ventures, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

A deferred tax asset is recognised only to the extent that it is probable that taxable profits will be available against which the deductible temporary differences, carried forward tax credits or tax losses can be utilised.

Deferred tax assets and liabilities are measured on an undiscounted basis at the tax rates that are expected to apply when the related asset is realised or the liability is settled, based on tax rates and laws enacted or substantively enacted at the balance sheet date.

Dividends paid

The interim dividend is included in the financial statements in the period in which it is paid, and the final dividend in the period it is approved by the shareholders at an annual general meeting.

2. Significant accounting policies continued

Adjusting items

Adjusting items are disclosed separately in the income statement where it is necessary to do so due to their nature or amount and to provide further understanding of the Group's financial performance. Adjusting items comprises exceptional items, acquisition related costs, amortisation and impairment of acquired intangible assets, goodwill impairment, share-based payment and impairment of associate and the tax effect of these items.

Certain items are classified as exceptional items due to their nature, amount or infrequency. Such presentation is relevant to an understanding of the Group's financial statements. These items are not part of the Group's normal ongoing operations.

Critical accounting assumptions and judgements

The preparation of financial statements requires the Group to make estimates and assumptions that affect items reported. Such estimates and assumptions are based on management's best knowledge of current facts, circumstances and future events, actual results may differ, possibly significantly, from those estimates. The areas requiring a high degree of judgement or where assumptions and estimates are significant to the consolidated financial statements are discussed below.

Business combinations and goodwill

For the purpose of impairment tests, the goodwill arising from each business combination is allocated to cash-generating units ("CGUs") that are expected to benefit from the combination and which represent the lowest level within the Group at which management monitors goodwill. There have been changes in the identification of CGUs in the year which are disclosed in note 14.

The change in the composition of CGUs has resulted in a reallocation of goodwill between the previous Networks & Applications CGU and the new Networks & Security and Lifecycle Service Assurance CGUs on a relative value basis. Goodwill has also been allocated between the previous CGUs; Service Experience & Service Assurance Broadband and Wireless & Positioning, and the new Lifecycle Service Assurance and Connected Devices CGUs on a historical basis. Additionally, there is a requirement in IAS 36 'Impairment of Assets' that impairment testing of goodwill must be performed at a level no larger than an operating segment as defined in IFRS 8 'Operating Segments'. Further details are disclosed in note 14.

The Group tests annually by CGU whether goodwill has suffered impairment and more frequently when events or circumstances indicate that the current carrying value may not be recoverable. The recoverable amounts of CGUs have been determined based on value in use calculations which require estimates and assumptions to be made in relation to management's expectations of growth in adjusted operating profit before depreciation and amortisation; long-term growth rates; and appropriate discount rates to reflect the risks involved.

Changing the assumptions selected by management, in particular the reallocations of goodwill and the discount rate and growth rate assumptions used in the cash flow projections, could significantly affect the Group's impairment evaluation and hence reported assets and profits and losses. Further details, including sensitivity analysis, is included in note 14 to the consolidated financial statements.

Defined benefit pension plans

The pension cost and the defined benefit pension obligation of the Group's defined benefit pension plans are based on a number of selected assumptions; these include the discount rate, inflation rate, salary growth and longevity. Differences arising from actual experience or future changes in assumptions will be reflected in future periods. The effect of changing these assumptions is described in note 10.

Revenue recognition

For revenue recognition purposes contractual arrangements are accounted for as two or more separate transactions only where the commercial substance is that the individual components operate independently of each other, because they are capable of being provided separately from one another and it is possible to attribute reliable fair values to every component. Management exercises a degree of judgement in setting the criteria used for determining when revenue which involves several elements should be recognised and the fair values allocated to each element. The fair values determined and allocated to each element may impact the timing of revenue recognition and the determination of fair values can involve complex judgements. The Group generally determines the fair value of individual elements based on prices at which the deliverable is regularly sold on a standalone basis after considering customer discounts where appropriate.

Income taxes

The Group is subject to income taxes in a number of tax jurisdictions and judgement is applied in determining the worldwide provision for income taxes. There are many transactions for which the final tax determinability is uncertain. For example liabilities are recognised for anticipated tax audit issues based on whether additional taxes are likely to be due based on the facts and circumstances known at the time the financial statements are prepared. Where the final outcome differs from the amounts that were initially recorded the differences will be recorded in the future period in which the determination is made.

Recognition of deferred tax assets

The recognition of deferred tax assets is based upon whether it is more likely than not that there will be sufficient and suitable taxable profits in the relevant legal entity or tax group against which to utilise the assets in the future. The extent to which deferred tax assets can be recognised is based on current forecasts and estimates prepared by management. A change to these forecasts and estimates

2. Significant accounting policies continued

could result in a different recognition outcome. Judgement is required when determining probable future taxable profits, which are estimated using the latest available profit forecasts. Unrecognised deferred tax assets are disclosed in note 23.

Provisions

Provisions are estimates and the actual cost and timing of future cash flows are dependent on future events. The Group exercises judgement in recognising provisions. Judgement is necessary to assess the likelihood that a liability will arise and to quantify the possible amount of any financial settlement. The inherent uncertainty of such matters means that actual amounts of transactions may differ materially from estimates provided. Any difference between the amounts previously recognised and the actual amount is recognised immediately in the consolidated income statement.

New standards and interpretations not applied

The IASB and IFRIC have issued the following standards and interpretations with an effective date for the Group after the date of these financial statements:

International Accounting Standards ("IAS/IFRS")		Effective for annual periods beginning on or after
IFRS 2	Amendments to IFRS 2 – Classification and Measurement of Share-based Payment Transactions	01 January 2018
IFRS 9	Financial Instruments	01 January 2018
IFRS 15	Revenue from Contracts with Customers	01 January 2018
IFRS 16	Leases	01 January 2019
IAS 7	Amendments to IAS 7 – Disclosure Initiative	01 January 2017
IAS 12	Amendments to IAS 12 – Recognition of Deferred Tax Assets for Unrealised Losses	01 January 2017
IFRIC 22	Foreign Currency Translations and Advanced Considerations	01 January 2018
Annual Improvements		
2014-2016 Cycle		01 January 2017

The directors do not anticipate that the adoption of these standards and interpretations will have a material impact on the Group's financial statements in the period of initial application other than in relation to IFRS 9, IFRS 15 and IFRS 16 which are discussed below.

IFRS 9 Financial Instruments

IFRS 9 'Financial Instruments' was issued in July 2014 to replace IAS 39 'Financial Instruments: Recognition and Measurement' and is effective for accounting periods beginning on or after 1 January 2018. It has not yet been adopted by the EU. For the Group, transition to IFRS 9 will take place on 1 January 2018.

The new standard sets out three new areas: classification and measurement, impairment and a new hedge accounting model. The new standard will impact the recognition and measurement of the Group's financial instruments and will require certain additional disclosures. The Group is continuing to assess the impact of IFRS 9 but the changes to recognition and measurement of financial liabilities, changes to hedge accounting activities and impairment of financial assets are not currently considered likely to have a material impact on the Group's activities.

IFRS 15 Revenue from Contracts with Customers

IFRS 15 'Revenue from Contracts with Customers' was issued in May 2014 and is effective for accounting periods beginning on or after 1 January 2018. It has not yet been adopted by the EU. For the Group, transition to IFRS 15 will take place on 1 January 2018, with restated 2017 comparatives.

IFRS 15 sets out the requirements for recognising revenue from contracts with customers. The standard requires entities to apportion revenue earned from contracts to performance obligations on a relative standalone selling price basis, based on a five-step model.

The Group is still in the process of quantifying the implications of IFRS 15, however, we expect the following indicative impacts:

- IFRS 15 will require the Group to identify deliverables in contracts with customers that qualify as distinct performance obligations. The transaction price receivable from customers must be allocated between the Group's performance obligations under the contracts on a relative stand-alone selling price basis. Currently revenue is allocated to deliverables, using a similar underlying concept, on a fair market value basis. The primary impact on revenue reporting will be that when the Group sells bundled hardware and software together with professional service agreements to customers, revenue allocated to the various components could be different and where this results in additional revenue recognised as services that has not yet been delivered, this will be reflected on the balance sheet as deferred income.

2. Significant accounting policies continued

- Sales commissions resulting directly from securing contracts with customers are currently expensed when occurred. IFRS 15 will require these costs of acquiring contracts to be recognised as an asset when incurred, to be expensed over the associated contract period as revenue is recognised. This will generally lead to the later recognition of charges for some commissions paid. If the expected contract period is one year or less, then the commission fee is expensed when incurred.
- There will be a corresponding effect on tax liabilities in relation to the above impacts.

The Group is continuing to assess the impact of these and other accounting changes that will arise under IFRS 15, however the changes highlighted above are not expected to have a material impact on the consolidated income statement and consolidated balance sheet after the Group adopts IFRS 15 on 1 January 2018.

When IFRS 15 is adopted, it can be applied either on a fully retrospective basis, requiring the restatement of the comparative periods presented in the financial statements, or with the cumulative impact of IFRS 15 applied as an adjustment to equity on the date of adoption. When the latter approach is applied it is necessary to disclose the impact of IFRS 15 on each line item in the financial statements in the reporting period. The Group intends to adopt the fully retrospective approach.

IFRS 16 Leases

IFRS 16 'Leases' was issued in January 2016 to replace IAS 17 'Leases' and is effective for accounting periods beginning on or after 1 January 2019. IFRS 16 has not yet been adopted by the EU.

IFRS 16 eliminates the classification of leases as either operating leases or finance leases as per IAS 17, and introduces a single lessee accounting model. Lease agreements will give rise to the recognition of an asset representing the right to use the leased item and a corresponding loan obligation for future lease payables. Lease costs will be recognised in the form of depreciation of the right to use asset and interest on the lease liability. Lessee accounting under IFRS 16 will be similar to existing IAS 17 accounting for finance leases, but will be fundamentally different for operating leases where rental charges are currently expensed on a straight-line basis and no lease asset or lease loan obligation is recognised. The Group's operating lease commitments are disclosed in note 28.

The Group is assessing the impact of IFRS 16 on the financial statements, however, the changes are expected to have a material impact on the consolidated balance sheet. The Group is still assessing the impact on the consolidated income statement.

3. Revenue

	2016 $ million	2015 $ million
Sale of goods	**322.7**	342.3
Maintenance and support services	**132.7**	132.1
Royalty income	**2.5**	2.7
Total revenue	**457.9**	477.1

4. Operating segments

The Group's organisational structure is based on differences in the products and services offered by each segment and information regularly reviewed by the Group's Chief Executive Officer, its chief operating decision maker, is presented on this basis. The Group's operating segments follow this structure.

The Group's reportable operating segments are Networks & Applications, Wireless & Positioning and Service Assurance. The Group evaluates segment operating profit before exceptional items, acquisition related costs, acquired intangible asset amortisation and impairment, goodwill impairment and share-based payment. Finance income, finance costs and share of results of associate are not allocated to the reportable segments. Corporate is not an operating segment and costs are separately reported and not allocated to the reportable segments.

Information on segment assets and segment liabilities is not regularly provided to the Group's Chief Executive Officer and is therefore not disclosed below. There is no aggregation of operating segments.

The principal activities of each of the reportable operating segments are as follows:

- Networks & Applications develops innovative solutions for functional, performance and security testing of next-generation networks and applications that simulate real-world conditions in the lab, before a commercial launch and in the live network.
- Wireless & Positioning provides functional and performance test systems that enable customers to develop smartphones and other wireless connected devices, as well as positioning, navigation and timing systems for military, space, research and other high-precision applications.
- Service Assurance provides solutions to enable service providers to turn-up new services and diagnose and troubleshoot network and customer issues, as well as systems for mobile device management, device analytics and intelligence solutions for mobile operators.

4. Operating segments continued

With effect from 1 January 2017 the operating segments have been reorganised to focus certain product lines and to combine resources and planning efforts in other product lines. The following changes will be made to the operating segments:

- The Networks & Applications operating segment will be divided into five distinct lines of business; Cloud IP, Applications Security, Automotion Platform Technologies, Mobility Infrastructure and Spirent Technologies.
- The Service Assurance Broadband line of business will be split by product offering between the core Service Assurance business and Service Experience line of business.

The new operating segments will be as follows:

- Networks & Security comprising our Cloud IP, Application Security and Positioning lines of business with the aim of addressing the needs of the lab test market for Ethernet, Virtual, Data Center, applications test and timing for critical infrastructure.
- Lifecycle Service Assurance comprising our Mobility Infrastructure, Customer Experience Management, Service Assurance and Automation Platform Technologies lines of business. All businesses in this segment target wireless service providers production networks aimed at reducing operating costs, increasing service quality and providing real-time analytics to trigger automatic tests and fixes to network degradation.
- Connected Devices comprising our Wireless & Service Experience lines of business together with Communications Technologies Management (formerly Device Intelligence and Developer Tools). The future opportunities for this segment are centred around 5G wireless development, performance and security of connected devices and the challenges to network providers coming from the Internet of Things.

A document showing restated comparative information is available to view and download at http://corporate.spirent.com/.

	Notes	Networks & Applications	Wireless & Positioning	Service Assurance	Corporate	2016 $ million Total
Revenue						
External revenue		259.4	118.5	80.0	–	457.9
There were no inter-segment sales.						
Loss before tax						
Total reportable segment profit/(loss) before exceptional items		25.2	17.1	11.7	(7.5)	46.5
Exceptional items	6	(1.2)	(1.4)	(2.2)	–	(4.8)
Total reportable segment profit/(loss)		24.0	15.7	9.5	(7.5)	41.7
Unallocated amounts						
Acquired intangible asset amortisation and impairment						(20.6)
Goodwill impairment	14					(61.4)
Share-based payment	31					(0.8)
Operating loss						(41.1)
Finance income						0.3
Finance costs						(0.7)
Share of loss of associate						(4.5)
Loss before tax						(46.0)
Other information						
Product development		61.4	28.1	22.2	–	111.7
Expenditure on intangibles	14	–	1.1	–	–	1.1
Expenditure on property, plant and equipment	15	11.6	3.7	1.9	0.1	17.3
Intangible asset amortisation – other		–	0.9	–	–	0.9
Depreciation	15	10.6	5.7	2.5	0.3	19.1

Full year 2015 operating segment information has been restated for the following changes to the Group's operating segments which came into effect on 1 January 2016:

- The Service Experience line of business was combined with the core Service Assurance line of business and reclassified from Wireless & Service Experience to Service Assurance. As a result of this change the Wireless & Service Experience operating segment was renamed Wireless & Positioning. The enlarged Service Assurance operating segment, which now includes the Service Experience line of business, continues to be named Service Assurance.
- The Spirent Technologies line of business was incorporated into the Networks & Applications operating segment and reclassified from Wireless & Service Experience to Networks & Applications.

4. Operating segments continued

	Notes	Networks & Applications[1]	Wireless & Positioning[1]	Service Assurance[1]	Corporate	2015 $ million Total
Revenue						
External revenue		244.0	137.2	95.9	–	477.1

There were no inter-segment sales.

	Notes	Networks & Applications[1]	Wireless & Positioning[1]	Service Assurance[1]	Corporate	Total
Profit before tax						
Total reportable segment profit/(loss) before exceptional items		18.9	14.9	14.1	(5.8)	42.1
Exceptional items	6	(2.6)	(9.1)	(0.9)	0.1	(12.5)
Total reportable segment profit/(loss)		16.3	5.8	13.2	(5.7)	29.6
Unallocated amounts						
Acquisition related costs						(0.1)
Acquired intangible asset amortisation						(14.8)
Goodwill impairment	14					(3.8)
Share-based payment	31					(0.8)
Operating profit						10.1
Finance income						0.4
Finance costs						(0.5)
Share of loss of associate						(0.4)
Profit before tax						9.6
Other information						
Product development		61.5	34.3	22.5	–	118.3
Expenditure on intangibles	14	–	0.9	2.1	–	3.0
Expenditure on property, plant and equipment	15	16.6	8.8	1.1	–	26.5
Intangible asset amortisation – other		–	1.1	–	–	1.1
Depreciation	15	10.1	11.9	2.8	0.2	25.0

Notes
1 Restated for changes to the Group's operating segment effective 1 January 2016 as set out above.

Under the new operating segment structure, effective 1 January 2017, the operating segment analysis for 2016 would be as follows:

	Networks & Security	Lifecycle Service Assurance	Connected Devices	Corporate	Total
External revenue	262.2	99.2	96.5	–	457.9
Total reportable segment profit/(loss) before exceptional items	47.2	11.2	(4.4)	(7.5)	46.5

Geographical information

	2016 $ million	2015 $ million
Revenue by market		
Americas	**254.1**	268.1
Asia Pacific	**149.3**	148.2
Europe, Middle East and Africa	**54.5**	60.8
	457.9	477.1

Europe, Middle East and Africa includes United Kingdom revenue of $7.9 million (2015 $7.6 million).

Americas includes United States revenue of $244.4 million (2015 $254.9 million).

Asia Pacific includes China revenue of $81.0 million (2015 $82.1 million).

Revenues are attributed to countries based on customer location.

4. Operating segments continued

	2016 $ million	2015 $ million
Non-current assets		
Americas	**206.9**	258.7
Asia Pacific	**4.4**	5.8
Europe, Middle East and Africa	**5.8**	38.2
	217.1	302.7

Europe, Middle East and Africa includes United Kingdom non-current assets of $0.7 million (2015 $2.0 million).

Americas includes United States non-current assets of $194.9 million (2015 $247.1 million).

No one customer accounted for 10 per cent or more of total Group revenue in either 2016 or 2015.

5. Profit before tax

The following items have been charged or (credited) in arriving at profit before tax:

	Notes	2016 $ million	2015 $ million
Employee benefit costs	9	**216.3**	225.6
Costs of inventories recognised as an expense		**83.5**	92.9
Write-down of inventories to net realisable value	19	**0.5**	0.7
Amortisation of intangible assets	14	**13.8**	15.9
Depreciation of property, plant and equipment			
Owned assets	15	**19.1**	25.0
Operating leases			
Minimum lease payments		**9.2**	9.4
Product development costs		**111.7**	118.3
Net foreign exchange gain		**(3.4)**	(1.6)

Services provided to all of the operations of the Group by the auditor, Ernst & Young LLP, and its associates:

	2016 $ million	2015 $ million
Audit services		
Group audit fee	**0.9**	0.9
Audit of subsidiaries	**–**	0.1
Total audit fee	**0.9**	1.0
Other fees to auditors		
Taxation advisory services	**0.1**	0.1
	1.0	1.1

A description of the work of the Audit Committee is set out in the Audit Committee report on pages 58 to 63 and includes an explanation of how auditor objectivity and independence is safeguarded when non-audit services are provided by the auditor.

6. Exceptional items

	2016 $ million	2015 $ million
Employee severance costs	**3.2**	6.9
Property, plant and equipment accelerated amortisation	**0.3**	3.7
Outsourcing fees	**–**	1.7
Lease provision on vacant space	**0.4**	0.5
Inventory provision	**0.3**	–
Other costs	**0.6**	0.3
Prior year provision release	**–**	(0.6)
	4.8	12.5

In 2016, Spirent undertook a fundamental review of the lines of business in order to bring more focus to certain product lines and to combine resources and planning efforts in other product lines. This resulted in a change to the Group's reported operating segments.

6. Exceptional items continued

In addition, Spirent reviewed the sales organisation and compensation structure. The change in product line emphasis and organisational review resulted in exceptional restructuring costs. Further details are given in note 4.

In 2015, as a result of changes in the wireless device test and carrier acceptance market Spirent undertook targeted cost reduction actions in order to protect profitability. The most significant action taken was to outsource engineering services in the Wireless & Positioning operating segment to provide a more cost effective and flexible resource for the future.

The tax effect of exceptional items is a credit of $1.1 million (2015 $4.2 million). The total cash outflow in respect of exceptional items charged in 2016 is anticipated to be $3.9 million with $1.4 million actually paid in the year (2015 $1.8 million). The cash outflow in 2016 in respect of exceptional items charged in 2015 is $7.0 million.

7. Finance income

	2016 $ million	2015 $ million
Bank interest receivable	0.3	0.4

8. Finance costs

	Note	2016 $ million	2015 $ million
Net defined benefit pension plan interest	10	0.7	0.5

9. Employees

The average number of people employed by the Group during the year was:

	2016 Number	2015 Number
Manufacturing	352	360
Product development	587	677
Selling and distribution	471	515
Administration	189	202
	1,599	1,754

Employee benefit costs were:

	Note	2016 $ million	2015 $ million
Remuneration		192.4	200.4
Social security costs		15.7	16.3
Pension and other related costs		7.4	8.1
Expense of share-based payment	31	0.8	0.8
		216.3	225.6

Please refer to the Report on directors' remuneration on pages 64 to 83 and note 34 for disclosures relating to the emoluments, share incentives and pensions of the directors.

10. Pensions

Defined benefit plans

i) Characteristics and risks associated with the Plans

The Group sponsors two funded defined benefit pension plans in the United Kingdom: the Spirent Communications plc Staff Pension & Life Assurance Plan ("Staff Plan") and the Spirent Communications plc Retirement Cash & Life Assurance Plan ("Cash Plan"). These plans are funded and have full UK HM Revenue & Customs ("HMRC") tax-exempt approval. Both schemes are administered by a trustee board which is comprised of representatives from the employer, member nominated trustees and an independent trustee. The trustee board operates in accordance with the Trust Deed and Rules of each Plan and acts in the interests of all of its members.

- The Staff Plan is the Group's most significant plan, and it provides its members with retirement benefits based on their final salary and length of service. The Staff Plan was closed to new entrants on 1 October 2002.
- The Cash Plan is primarily a defined contribution arrangement, although there are some legacy defined benefits ("Old Section") that have been valued for the purpose of these accounts in accordance with IAS 19. Members who left service before 1992 are entitled to a cash lump sum on retirement that is based on their salary and length of service. Members of the Old Section are entitled to defined contribution benefits, but with an underpin based on salary and length of service.

There is also a United Kingdom unfunded plan, which consists of a contractual obligation for the Group to top up certain former employees' benefits whose salaries exceeded the statutory earnings cap.

As with the vast majority of similar arrangements in the United Kingdom, the Group ultimately underwrites the risks relating to the defined benefit plans. These risks include investment risks and demographic risks, such as the risks of members living longer than expected.

The plans hold a significant proportion of their assets in equity. Strong future equity returns would be expected to reduce the Group's future cash contributions (and vice versa).

Expected contributions to the defined benefit plans in 2017 are $6.3 million. This includes the contributions agreed with the funded plans' trustees in accordance with UK legislation. Following the triennial valuations as at 1 April 2015, the Group has agreed to pay $6.2 million (£5.0 million) per annum into the Staff Plan from 1 July 2016, over a seven year period, in order to clear the funding deficit as assessed by the trustees' independent actuary.

If the contributions currently agreed are insufficient to pay the benefits due, the Group will need to make further contributions.

ii) Amounts in the financial statements

The assets and liabilities on the balance sheet are as follows:

	2016 $ million	2015 $ million
Assets		
UK defined benefit pension plan – Cash Plan	**0.9**	1.2
Liabilities		
UK defined benefit pension plan – Staff Plan	**(13.7)**	(20.3)
UK unfunded plan	**(0.7)**	(0.7)
	(14.4)	(21.0)
	(13.5)	(19.8)

For the purposes of the following disclosures the Staff Plan and Cash Plan have been combined as the Cash Plan is immaterial to these financial statements.

10. Pensions continued

a) The assets and liabilities in each plan

	2016 $ million	2015 $ million
Staff Plan		
Quoted		
Equities	**62.4**	62.3
Government bonds	**4.7**	4.6
Unquoted		
LDI funds	**33.3**	26.2
Cash benchmarked bonds	**91.4**	89.4
Corporate bonds	**3.6**	3.3
Hedge funds	**19.1**	23.4
Insured annuities	**3.5**	4.1
Property	**1.2**	1.6
Cash and other	**18.7**	30.2
Fair value of plan assets	**237.9**	245.1
Present value of defined benefit pension plan obligations	**(251.6)**	(265.4)
Deficit in the plan on the balance sheet	**(13.7)**	(20.3)

	2016 $ million	2015 $ million
Cash Plan		
Quoted		
Equities	**4.1**	4.3
Government bonds	**3.7**	4.1
Unquoted		
Insured annuities	**0.1**	0.2
Cash and other	**2.3**	2.8
Fair value of plan assets	**10.2**	11.4
Present value of defined benefit pension plan obligations	**(9.3)**	(10.2)
Surplus in the plan on the balance sheet	**0.9**	1.2

The plans are prohibited from investing in Spirent's own financial instruments.

The fair values of the quoted equity and debt instruments are determined based on quoted market prices in active markets whereas the fair values of the other assets are not.

b) Analysis of the amounts charged to the income statement

	2016 $ million	2015 $ million
Plan administration expenses	**0.7**	0.8
Current service cost	**0.1**	0.2
Amount charged to operating costs	**0.8**	1.0
Net interest on the net defined benefit pension liability	**0.7**	0.5
Net charge to the income statement	**1.5**	1.5

c) Analysis of amount recognised directly in the statement of comprehensive income

	2016 $ million	2015 $ million
Re-measurement gain/(loss) on plans' assets	**32.0**	(10.9)
Actuarial gain/(loss) arising from experience	**4.3**	(5.5)
Actuarial gain arising from the demographic assumptions	**8.0**	–
Actuarial (loss)/gain arising from changes in financial assumptions	**(46.5)**	7.2
Re-measurement of the net defined benefit pension liability	**(2.2)**	(9.2)

10. Pensions continued

d) Movements in the present value of funded defined benefit obligations

	2016 $ million	2015 $ million
At 1 January	275.6	293.2
Current service cost	0.1	0.2
Interest cost	9.5	10.3
Benefit payments	(10.9)	(11.5)
Actuarial (gain)/loss arising from experience	(4.3)	5.5
Actuarial gain arising from the demographic assumptions	(8.0)	–
Actuarial loss/(gain) arising from changes in financial assumptions	46.5	(7.2)
Exchange adjustment	(47.6)	(14.9)
Present value of funded defined benefit pension plans' obligations	**260.9**	275.6

e) Movements in the fair value of plans' assets

	2016 $ million	2015 $ million
At 1 January	256.5	279.5
Interest income on plans' assets	8.8	9.8
Employer contributions	7.0	4.3
Benefit payments	(10.9)	(11.5)
Plan administration expenses	(0.7)	(0.8)
Re-measurement gain/(loss) on plans' assets	32.0	(10.9)
Exchange adjustment	(44.6)	(13.9)
Fair value of plans' assets	**248.1**	256.5

f) The key financial assumptions

The assumptions used for both plans using a weighted average were as follows:

	2016 %	2015 %
Inflation – RPI	3.2	2.9
Inflation – CPI	2.1	1.8
Rate of increase in pensionable salaries	2.1	3.0
Rate of increase for pensions in payment pre 2001 service	3.7	3.6
Rate of increase for pensions in payment 2001 to 5 April 2005 service	3.1	2.8
Rate of increase for pensions post 5 April 2005 service	2.1	2.0
Rate of increase in deferred pensions	2.1	1.8
Rate used to discount plan liabilities	2.8	3.8

The mortality assumptions are based on standard mortality tables which allow for future mortality improvements. The assumptions are such that a member currently aged 65 (2015 aged 65) will live on average for a further 23.1 years (2015 23.6 years) if they are male and for a further 25.2 years (2015 25.8 years) if they are female. For a member who retires in 2036 (2015 in 2035) at age 65 (2015 age 65) the assumptions are that they will live on average for a further 24.8 years (2015 24.5 years) after retirement if they are male and for a further 27.1 years (2015 26.9 years) after retirement if they are female.

iii) Amount, timing and uncertainty of future cash flows

The approximate impact to the past service liabilities of changing these main assumptions is as follows:

- Reducing the discount rate by 0.1 per cent per annum would increase past service liabilities by $3.8 million (2015 $3.8 million).
- Increasing RPI inflation by 0.1 per cent would increase the plans' liabilities by $1.5 million (2015 $1.3 million).
- Increasing the life expectancy of a member by one year (by modifying the standard mortality tables using an appropriate scaling factor) would increase past service liabilities by $11.7 million (2015 $11.0 million).

There will also be an impact on the future service cost but given the small active population in these plans this is likely to be insignificant.

The sensitivity analysis may not be representative of the actual change as the changes in assumptions may not occur in isolation.

The weighted average duration of the defined benefit obligation is 15 years (2015 15 years).

10. Pensions continued

Defined contribution plans

United Kingdom

The Group contributes towards defined contribution pension plans for employees in the United Kingdom. Employer contributions into these plans for 2016 were $0.8 million (2015 $1.0 million).

United States

The Group maintains a defined contribution pension plan for employees of its United States subsidiaries. This plan, also known as a 401(k) Plan, allows employees to defer a percentage of their salary for retirement. The investment choices offered by the plan are a selection of diversified mutual funds offering a broad mix of investment return potential with varying levels of risk. In aggregate, the Group's contributions to the US plan totalled $4.1 million for 2016 (2015 $4.2 million). Total assets in the defined contribution plan at the end of 2016 were $239.6 million (2015 $221.8 million). There were no defined benefit plans in the United States in 2016 or 2015.

Other jurisdictions

Outside the United Kingdom and the United States employees are provided with pension arrangements determined in accordance with approved local practice and regulations. These arrangements are defined contribution plans. Total employer contributions for 2016 in respect of these plans amounted to $1.1 million (2015 $1.3 million).

Total employer contributions to defined contribution plans were $6.0 million (2015 $6.5 million).

Directors' pension arrangements

The pension arrangements of the executive directors are described in detail in the Report on directors' remuneration on pages 64 to 83.

11. Tax

	2016 $ million	2015 $ million
Tax credit in the income statement		
Current income tax		
UK tax	0.1	0.3
Foreign tax	5.3	4.8
Amounts overprovided in previous years	(0.2)	(3.8)
Total current income tax charge	5.2	1.3
Deferred tax		
Recognition of deferred tax assets-US research and experimental tax credit	(3.0)	(1.2)
Recognition of deferred tax assets-other	(0.2)	–
Write-off of previously recognised tax assets including rate changes	0.1	0.5
Reversal of temporary differences	(5.0)	(2.0)
Adjustments in respect of prior years	(0.8)	(2.5)
Total deferred tax credit	(8.9)	(5.2)
Tax credit in the income statement	**(3.7)**	(3.9)

The tax credit for the year ended 31 December 2016 was $3.7 million (2015 $3.9 million credit). This was after a prior year tax credit of $1.0 million and a tax credit on the adjusting items of $14.6 million (2015 prior year credit of $6.3 million and tax credit on adjusting items of $8.5 million). Excluding the prior year and adjusting items' tax credits, the effective tax rate was 26.9 per cent (2015 26.2 per cent).

Tax relating to items charged/(credited) to other comprehensive income or equity:

	2016 $ million	2015 $ million
Tax charge/(credit) on share incentives	0.1	(0.1)
Deferred tax credit on defined benefit pension plan	(0.4)	(1.8)

11. Tax continued

Reconciliation of the total tax credit

The tax credit in the income statement for the year is lower than the standard rate of corporation tax in the UK of 20.0 per cent (2015 20.25 per cent). The differences are reconciled below:

	Year ended 31 December 2016		
	Adjusted $ million	Adjusting $ million	Reported $ million
Accounting profit/(loss) before tax	44.2	(90.2)	(46.0)
Accounting profit multiplied by the UK standard rate of corporation tax of 20.0 per cent (2015 20.25 per cent)	8.8	(18.0)	(9.2)
Differences in overseas rates	4.8	(6.4)	(1.6)
Non-taxable income	(1.5)	–	(1.5)
Recognition of deferred tax assets	(0.2)	–	(0.2)
Write-off of previously recognised tax assets including rate changes	0.1	–	0.1
Current year losses upon which no deferred tax recognised	0.9	–	0.9
UK & US research and experimental tax credit	(3.2)	–	(3.2)
Withholding tax	1.3	–	1.3
Permanent differences	0.9	9.8	10.7
Tax overprovided in prior years	–	(1.0)	(1.0)
Total tax charge/(credit) reported in the income statement	11.9	(15.6)	(3.7)

	Year ended 31 December 2015		
	Adjusted $ million	Adjusting $ million	Reported $ million
Adjusted accounting profit/(loss) before tax	41.6	(32.0)	9.6
Accounting profit multiplied by the UK standard rate of corporation tax of 20.25 per cent (2014 21.5 per cent)	8.4	(6.5)	1.9
Differences in overseas rates	3.2	(2.8)	0.4
Non-taxable income	(1.2)	–	(1.2)
Write-off of previously recognised tax assets including rate changes	0.5	–	0.5
Current year losses upon which no deferred tax recognised	0.6	–	0.6
UK & US research and experimental tax credit	(2.6)	–	(2.6)
Withholding tax	1.4	–	1.4
Permanent differences	0.6	0.8	1.4
Tax overprovided in prior years	–	(6.3)	(6.3)
Total tax charge/(credit) reported in the income statement	10.9	(14.8)	(3.9)

The Group's tax rate is sensitive to the geographic mix of products and reflects a combination of higher tax rates in certain jurisdictions, such as the United States, with a statutory rate of 35 per cent and other regions' significantly lower tax rates like the United Kingdom at 20 per cent, China 15 per cent and other rates that fall somewhere in between. Research and experimental credits of $3.2 million (2015 $2.6 million) bring down the rate but losses suffered in the businesses in Denmark and Israel increased our tax rate because no tax benefit is recognised for those losses due to the uncertaintly of future profitability in these businesses.

Of the total goodwill impairment of $61.4 million (2015 $3.8 million), $38.5 million (2015 $3.8 million) is not deductible for tax purposes as it relates to stock acquisitions or businesses where we are not getting any tax benefit due to losses. The non-deductible goodwill impairment reconciling item of $7.7 million (2015 $0.8 million) is reflected in permanent differences. The remaining $2.1 million of permanent differences relates to impairment of acquired intangibles and loss on associate.

12. Earnings per share

Basic

Earnings per share is calculated by dividing the (loss)/profit for the year attributable to owners of the parent Company by the weighted average number of Ordinary Shares outstanding during the year.

Diluted

Diluted earnings per share is calculated by dividing the (loss)/profit for the year attributable to owners of the parent Company by the weighted average number of Ordinary Shares outstanding during the year plus the weighted average number of Ordinary Shares that would be issued on the conversion of all dilutive potential Ordinary Shares into Ordinary Shares.

	2016 $ million	2015 $ million
(Loss)/profit for the year attributable to owners of the parent Company	**(42.3)**	13.3

	Number million	Number million
Weighted average number of Ordinary Shares in issue – basic	**610.6**	610.5
Dilutive potential of employee share incentives[1]	**–**	1.7
Weighted average number of Ordinary Shares in issue – diluted	**610.6**	612.2

Note
1 The effect of dilutive employee share incentives is anti-dilutive in 2016 and is therefore ignored in calculating diluted EPS. Dilutive potential of employee share incentives is 2.4 million in 2016.

	Cents	Cents
(Loss)/earnings per share		
Basic	**(6.93)**	2.18
Diluted	**(6.93)**	2.17

Adjusted

The Group is disclosing adjusted earnings per share for continuing operations attributable to owners of the parent Company in order to provide a measure to enable period-on-period comparisons to be made of its performance. The following items are excluded from adjusted earnings:

- exceptional items
- acquisition related costs
- acquired intangible asset amortisation and impairment
- goodwill impairment
- impairment of investment in associate
- share-based payment
- tax effect on the above items
- prior year tax

A reconciliation is provided below:

		2016		2015	
	Notes	$ million	EPS cents	$ million	EPS cents
(Loss)/profit for the year attributable to owners of the parent Company		**(42.3)**	**(6.93)**	13.3	2.18
Exceptional items	6	**4.8**		12.5	
Acquisition related costs		**–**		0.1	
Acquired intangible asset amortisation and impairment		**20.6**		14.8	
Goodwill impairment	14	**61.4**		3.8	
Impairment of investment in associate	16	**2.6**		–	
Share-based payment	31	**0.8**		0.8	
Tax effect on the above items	11	**(14.6)**		(8.5)	
Prior year tax credit	11	**(1.0)**		(6.3)	
Adjusted basic		**32.3**	**5.29**	30.5	5.00
Adjusted diluted			**5.29**		4.98

There were no Ordinary Share transactions that occurred after 31 December that would have significantly changed the number of Ordinary Shares or potential Ordinary Shares outstanding at the period end if those transactions had occurred before the end of the reporting period in either year.

13. Dividends paid and proposed

	2016 $ million	2015 $ million
Declared and paid in the year		
Equity dividend on Ordinary Shares		
Final dividend paid for the year ended 31 December 2015 of 2.21 cents (1.59 pence) per Ordinary Share (31 December 2014 2.21 cents (1.43 pence))	**14.1**	13.4
Interim dividend 2016 1.68 cents (1.27 pence) per Ordinary Share (2015 1.68 cents (1.08 pence))	**10.1**	10.1
	24.2	23.5
Proposed for approval at AGM (not recognised as a liability at 31 December)		
Equity dividend on Ordinary Shares		
Final dividend 2016 2.21 cents (1.80 pence) per Ordinary Share (2015 2.21 cents (1.59 pence))	**13.5**	13.4

The directors are proposing a final dividend in respect of the financial year ended 31 December 2016 of 2.21 cents per Ordinary Share (1.80 pence) (2015 2.21 cents (1.59 pence)), which will absorb an estimated $13.5 million of shareholders' funds (2015 $13.4 million). It will be paid on 5 May 2017 to Ordinary shareholders who are on the Register of Members at close of business on 10 March 2017. Payment will be made to ADR holders on 15 May 2017. No liability is recorded in the financial statements in respect of this final dividend.

Dividends are determined in US dollars and paid in pounds sterling. The exchange rate for determining the amount of the final dividend to be paid for 2016 was $1.23: £1 (2015 $1.39: £1).

14. Intangible assets

	Note	Goodwill	Customer list	Current technology	R&D asset	Database	Brand names	Non-compete covenant	Licences	$ million Total
Cost, net of accumulated amortisation and impairment losses										
At 1 January 2015		223.2	14.0	28.4	–	2.9	1.6	1.0	2.2	273.3
Acquisitions	33	1.3	0.2	0.5	–	–	0.1	–	–	2.1
Additions		–	–	–	–	–	–	–	0.9	0.9
Impairment		(3.8)	–	–	–	–	–	–	–	(3.8)
Amortisation for the year		–	(5.1)	(8.3)	–	(0.6)	(0.5)	(0.3)	(1.1)	(15.9)
Exchange adjustment		(3.8)	(0.3)	(0.6)	–	(0.3)	–	–	–	(5.0)
At 1 January 2016		**216.9**	**8.8**	**20.0**	**–**	**2.0**	**1.2**	**0.7**	**2.0**	**251.6**
Additions		**–**	**–**	**–**	**–**	**–**	**–**	**–**	**1.1**	**1.1**
Adjustment		**(0.2)**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**(0.2)**
Impairment		**(61.4)**	**(0.9)**	**(4.7)**	**–**	**(1.5)**	**(0.2)**	**(0.4)**	**–**	**(69.1)**
Amortisation for the year		**–**	**(3.9)**	**(7.7)**	**–**	**(0.5)**	**(0.5)**	**(0.3)**	**(0.9)**	**(13.8)**
Exchange adjustment		**0.4**	**–**	**(0.2)**	**–**	**–**	**–**	**–**	**–**	**0.2**
At 31 December 2016		**155.7**	**4.0**	**7.4**	**–**	**–**	**0.5**	**–**	**2.2**	**169.8**
At 31 December 2015										
Cost (gross carrying amount)		623.4	21.2	44.1	1.0	5.0	2.7	1.1	12.8	711.3
Amortisation and accumulated impairment losses		(406.5)	(12.4)	(24.1)	(1.0)	(3.0)	(1.5)	(0.4)	(10.8)	(459.7)
Net carrying amount		216.9	8.8	20.0	–	2.0	1.2	0.7	2.0	251.6
At 31 December 2016										
Cost (gross carrying amount)		**621.9**	**21.1**	**43.9**	**1.0**	**5.0**	**2.7**	**1.1**	**11.8**	**708.5**
Amortisation and accumulated impairment losses		**(466.2)**	**(17.1)**	**(36.5)**	**(1.0)**	**(5.0)**	**(2.2)**	**(1.1)**	**(9.6)**	**(538.7)**
Net carrying amount		**155.7**	**4.0**	**7.4**	**–**	**–**	**0.5**	**–**	**2.2**	**169.8**

Goodwill is allocated at acquisition to the cash generating units ("CGUs") that are expected to benefit from that business combination.

The Group identifies CGUs at the lowest level at which cash flows are largely independent of other cash flows.

14. Intangible assets continued

Reorganisation of CGUs

With effect from 1 January 2017 the Group's operating segments have been reorganised to focus on certain product lines and to combine resources and planning efforts in relation to other product lines. Further details are given in note 4. Consequently, the most recent future cash flows for the Group have been prepared based on the new operating segment structure and are not available for the existing operating segments. As a result, the identified CGUs have been reorganised to align with the operating segments from 1 January 2017.

Prior to the reorganisation of CGUs, the goodwill was assessed for impairment on the pre-existing CGU basis. The carrying amount was in excess of the recoverable amount for the Developer Tools and Device Intelligence CGUs resulting in impairments of $13.3 million and $5.9 million, respectively, which relates solely to goodwill. The recoverable amounts of these CGUs were determined on a fair value less costs of disposal basis. The impairment charges are a consequence of the decision not to invest further in these lines of business as a result of a reassessment of expected future business performance in light of current trading and economic conditions. The impairment losses have been recognised in the consolidated income statement within other items. After the impairment charges there is no goodwill remaining in the Developer Tools or Device Intelligence CGUs and the recoverable amounts are nil. In 2016, the Developer Tools and Device Intelligence lines of business formed part of the Wireless & Postioning and Service Assurance operating segments, respectively.

In addition, the goodwill relating to the Epitiro line of business, amounting to $0.9 million, integrated within the Service Experience & Service Assurance Broadband CGU in 2016, was fully impaired as the goodwill is not supportable by the anticipated future cash flows. The recoverable amount of this line of business was determined on a fair value less costs of disposal basis. The impairment loss has been recognised in the consolidated income statement within other items. In 2016, the Epitiro business formed part of the Service Assurance operating segment.

There were no further goodwill impairments under the pre-existing CGU structure.

The reorganisation of the operating segments on 1 January 2017 has led to a change in the trading relationships and synergies between each line of business resulting in the disaggregation of the previous Wireless & Positioning and Service Experience & Service Assurance Broadband CGUs.

The change in the composition of CGUs resulted in a reallocation of goodwill between the previous Networks & Applications CGU and the Networks & Security and Lifecycle Service Assurance CGUs on a relative value basis. This amounted to $72.0 million to the Networks & Security CGU and $13.5 million to the Lifecycle Service Assurance CGU. The goodwill allocated to the previous Service Experience & Service Assurance Broadband CGU and the previous Wireless & Positioning CGU, amounting to $30.9 million and $56.6 million, respectively, was allocated to the Connected Devices CGU on a historical basis. The goodwill allocated to the previous Customer Experience Management CGU, amounting to $23.8 million, was allocated to the Lifecycle Service Assurance CGU on a historical basis. The reorganisation of the CGUs has resulted in goodwill being allocated to three CGUs as follows:

	2016 $ million
Networks & Security, an operating segment from 1 January 2017	72.0
Lifecycle Service Assurance, an operating segment from 1 January 2017	37.6
Connected Devices, an operating segment from 1 January 2017	46.1
	155.7

In 2015, goodwill was allocated to seven CGUs as follows:

	2015 $ million
Networks & Applications, an operating segment	85.3
Wireless & Positioning, product lines within the Wireless & Positioning operating segment	56.2
Service Experience & Service Assurance Broadband, product lines within the Service Assurance operating segment	30.9
Developer Tools, a product line within the Wireless & Positioning operating segment	13.3
Customer Experience Management, a product line within the Service Assurance operating segment	23.8
Device Intelligence, a product line within the Service Assurance operating segment	6.1
Epitiro Group Limited, a product line within the Service Assurance operating segment	1.3
	216.9

14. Intangible assets continued

Annual impairment test

The Group has an annual impairment testing date of 30 November. The key assumptions used in the value in use calculations were:

- revenue growth rates;
- gross margin;
- operating expenses;
- discount rate; and
- growth rate used to extrapolate cash flows beyond the five-year period covered by management's projections.

The cash flows are derived from the most recent financial budgets for the next financial year, as approved by the Board, and the Group's three-year strategic plan. Cash flows years four and five are extrapolated based on long range plans. Cash flows in subsequent years have been extrapolated using a steady 2.5 per cent for all CGUs (2015 2.5 per cent for all CGUs), which management estimates to be the approximate average long-term growth rate for the industries in which these units operate. Fundamentally this long-term growth is based on a proxy for global long-term inflation taking into consideration more developed and developing markets. The growth rates used in the value in use calculations are set at the same level for each CGU as all the CGUs operate within similar markets which share the same growth drivers and characteristics. The discount rates incorporate the specific risks relating to each CGU.

The discount rate applied to the cash flows is based on the weighted average cost of capital of comparable companies by taking the risk free rate for 30-year government bonds and making an adjustment to reflect the increased risk of investing in equities. In making this adjustment, the inputs required are the equity market risk premium, beta, and the risk adjustment applied to reflect the systematic risk of Spirent and the specific CGUs, taking into account factors such as size and the territories in which each CGU operates.

The cash flows have been discounted using the following pre-tax discount rates:

	2016 %
Networks & Security	**16.0**
Lifecycle Service Assurance	**17.4**
Connected Devices	**15.6**

	2015 %
Networks & Applications	14.8
Wireless & Positioning	14.9
Service Experience & Service Assurance Broadband	17.1
Developer Tools	14.2
Customer Experience Management	17.8
Device Intelligence	16.1

For Spirent the key factor in relation to the cash flow forecasts is the ability to forecast revenue. All CGUs operate in the data technology market and generate a high gross profit (gross margin); consequently changes in revenue can have a significant impact on the operating profit and cash flows. Revenue growth rates used in the projections are based on management's estimate of growth in the markets served and take into account historic levels of growth, expected future developments in products and technology, industry forecasts and macro-economic conditions in the territories in which the CGUs operate. Gross margin and operating expenses are based on historical values adjusted for the effect of revenue growth, recent acquisitions and cost reduction actions committed prior to the impairment testing date.

The Networks & Security three year plan delivers growth from Cloud and IP into core emerging markets such as Automotive, Wi-Fi and TSN. Cloud and IP growth in high speed ethernet is expected to continue, supported by ongoing product development. Further growth in Networks & Security is expected in the Positioning business from launches of new tailored solutions. Management expects that the Application Security product line will deliver growth in market share within network equipment manufacturers and service providers with new hardware and synergies with Positioning and continued expansion in complementary solutions with Cloud and IP.

14. Intangible assets continued

The continuing drive in lab sales and enhancements to the feature set at the Mobility Infrastructure business unit is expected to grow revenue in Lifecycle Service Assurance on a relatively flat cost base in the near term. Management expects revenue increases at the Customer Experience Management business unit driven by the VisionWorks sales strategy and a relatively flat gross margin over the three year forecast period. The Lumos legacy business in Lifecycle Service Assurance is expected to drop in the near term to be replaced by growth in new Ethernet products supported by investment in product development, particularly in virtualisation. The individual business units in Lifecycle Service Assurance are expected to work together to deliver the three year plan to meet changes in customer needs and the competitive landscape.

The recoverable amount of each CGU was calculated on a value in use basis and was in excess of its carrying value for the Networks & Security and Lifecycle Service Assurance CGUs. The carrying amount of the Connected Devices CGU was in excess of its value in use and consequently an impairment loss of $41.3 million has been recognised which relates solely to goodwill. The impairment charge was driven by lower projected cash flows within the Wireless and Service Experience lines of business as a result of shifts in product mix and a reduction in the wireless device test market. Additionally, the reorganisation of CGUs in 2016 has resulted in the goodwill associated with Wireless and Service Experience being allocated to CGUs with a value in use that is based on different future cash flows. A different set of synergies and therefore projected cash flows has arisen from the realignment of these lines of business within a new operating segment structure. The impairment loss has been recognised in the consolidated income statement within other items.

Sensitivity to changes in key assumptions

There was significant headroom on the Networks & Security and Lifecycle Service Assurance CGUs. The directors believe that no reasonable possible change in any of the key assumptions used, in isolation, would cause the value in use of the Networks & Security and Lifecycle Service Assurance CGUs to fall below carrying value.

The Connected Devices CGU comprises the former Wireless and Service Experience CGUs. Connected Devices supplies lab test equipment to the mobile ecosystem as well as products and services to evaluate the field performance of mobile devices.

A downturn in the wireless device test market has led to the forecasts for the core business being revised down. The three year plans for Connected Devices forecast revenue growth as a result of the smartphone market stabilising following a period of correction together with growth from new products which address the key trends in IOT and 5G. Management expects gross margins to improve over the three year plan as a result of product mix shifts with operating expenditure remaining relatively flat. The businesses within Connected Devices share high customer overlap in the mobile ecosystem and are impacted by the same market forces. As a result management expects cost synergies across multiple functions.

The estimated recoverable amount of the Connected Devices CGU, after the $41.3 million impairment loss, is equal to its carrying value of $70.1 million. Consequently, any adverse change in key assumptions would, in isolation, cause a further impairment loss to be recognised.

The changes in the following table to assumptions used in the impairment review would, in isolation, lead to an (increase)/decrease to the aggregate impairment loss recognised in the year ended 31 December 2016:

	Increase by %	Impact $ million	Decrease by %	Impact $ million
Connected Devices				
Forecast revenue[1]	10	6.3	10	(6.4)
Long-term growth rate[2]	1	4.5	1	(3.8)
Discount rate[2]	1	(5.3)	1	6.3

Notes
1 Cumulative effect of an increase/decrease in revenue in year 1 by 10 per cent and continuing to apply the forecast growth rates to subsequent years.
2 Cumulative effect of an increase/decrease of 1 per cent in the stated assumption on the aggregate impairment loss recognised in the year.

14. Intangible assets continued

Intangible asset impairment

Year ended 31 December 2016

An intangible asset impairment charge of $7.7 million has been incurred in respect of the customer list, current technology, database, brand names and non-compete covenant intangible assets arising on the acquisitions of the Radvision Technology Business Unit and Mobilethink. At acquisition, the acquired intangibles were expected to be amortised over useful lives of between 2.5 and 7 years, however, lower than anticipated projected cash flows within these businesses has resulted in a reassessment of expected future business performance in light of current trading and planned future investment. The cash flows from these businesses, which form the legacy Developer Tools and Device Intelligence lines of business, are not expected to support the acquired intangible assets identified at acquisition and, therefore, they have been fully impaired.

The impairment charge has been recognised within other items in the income statement.

Year ended 31 December 2015

There was no impairment loss in respect of the other intangible assets.

15. Property, plant and equipment

$ million

	Land and buildings	Plant and machinery	Fixtures, fittings and equipment	Total
Cost, net of accumulated depreciation and accumulated impairment				
At 1 January 2015	11.9	30.4	9.9	52.2
Additions				
Owned assets	6.0	16.9	3.6	26.5
Disposals	–	(1.6)	(0.5)	(2.1)
Inter-class transfers	–	(1.4)	1.4	–
Depreciation charge for the year	(1.9)	(18.3)	(4.8)	(25.0)
Exchange adjustment	(0.1)	(0.3)	(0.1)	(0.5)
At 1 January 2016	**15.9**	**25.7**	**9.5**	**51.1**
Additions				
Owned assets	**1.7**	**11.9**	**3.7**	**17.3**
Disposals	**(0.1)**	**(1.5)**	**(0.1)**	**(1.7)**
Inter-class transfers	**0.4**	**(4.2)**	**3.8**	**–**
Depreciation charge for the year	**(2.5)**	**(11.9)**	**(4.7)**	**(19.1)**
Exchange adjustment	**(0.1)**	**(0.1)**	**(0.1)**	**(0.3)**
At 31 December 2016	**15.3**	**19.9**	**12.1**	**47.3**
At 31 December 2015				
Cost	24.5	94.5	49.2	168.2
Accumulated depreciation and accumulated impairment	(8.6)	(68.8)	(39.7)	(117.1)
Net carrying amount	15.9	25.7	9.5	51.1
At 31 December 2016				
Cost	**25.8**	**82.1**	**55.1**	**163.0**
Accumulated depreciation and accumulated impairment	**(10.5)**	**(62.2)**	**(43.0)**	**(115.7)**
Net carrying amount	**15.3**	**19.9**	**12.1**	**47.3**

None of the property, plant and equipment is held under finance lease arrangements.

16. Investment in associate

	2016 $ million	2015 $ million
Carrying amount for Jolata, Inc.	–	4.6

Jolata, Inc. ("Jolata") is a company incorporated in the US and its principal activity is the provision of network testing.

Jolata is considered an associate as the Group controls 26 per cent (2015 28 per cent) of the voting power and therefore has significant influence over the entity.

The following table summarises the financial information of Jolata as included in its own financial statements, adjusted for fair value adjustments at acquisition and differences in accounting policies.

	2016 $ million	2015 $ million
Non-current assets	0.2	0.4
Current assets	0.9	3.8
Current liabilities	(0.8)	(0.8)
The above amounts of assets and liabilities include the following:		
Cash and cash equivalents	0.1	3.4
Net assets (100%)	0.3	3.4
Spirent's ownership interest	26%	28%
Group's share of net assets	0.1	1.0
Acquisition fair value and other adjustments	(0.1)	3.6
Carrying amount of interest in associate	–	4.6
Summarised profit and loss in respect of Jolata, reflecting 100% of the relevant figures for the period post acquisition, is set out below:		
Revenue	0.4	–
Total comprehensive income (100%)	(7.4)	(1.6)
Group's share of total comprehensive income	(1.9)	(0.4)

During the year, the investment in Jolata was impaired by $2.6 million (2015 nil). Following the impairment, the recoverable amount in Jolata is nil (2015 $4.6 million).

The Group has no cumulative unrecognised share of losses in Jolata (2015 nil).

17. Capital commitments and contingent liabilities

The Group had capital commitments of $1.8 million at 31 December 2016 (31 December 2015 $2.0 million).

The Group has provided indemnities of $0.1 million (2015 $0.1 million) for certain ongoing business obligations under letters of credit for subsidiary companies.

18. Subsidiaries

A list of subsidiaries, including the name, country of incorporation and proportion of ownership interest is given on pages 151 and 152 of these financial statements.

19. Inventories

	2016 $ million	2015 $ million
Raw materials	8.7	8.9
Work in progress	0.7	1.1
Finished goods	18.0	12.9
	27.4	22.9

An expense of $0.5 million (2015 $0.7 million) has been recognised in the year for inventory write-downs. There were no reversals of prior period inventory write-downs (2015 nil).

No inventories are carried at fair value less costs to sell (2015 nil).

20. Trade and other receivables

	2016 $ million	2015 $ million
Non-current assets		
Trade receivables	–	0.1
Other receivables	4.1	4.0
Prepayments, accrued income and deferred costs	0.5	0.2
	4.6	4.3
Current assets		
Trade receivables	112.2	111.1
Other receivables	3.2	5.3
Prepayments, accrued income and deferred costs	13.5	11.6
	128.9	128.0
	133.5	132.3

The trade receivables are stated net of provisions for doubtful debts. The movement in the provision was as follows:

	2016 $ million	2015 $ million
At 1 January	1.4	1.1
Charge for the year	1.7	0.7
Released in the year	(0.8)	(0.4)
At 31 December	2.3	1.4

The directors consider that the carrying amount of trade and other receivables approximates their fair value.

The Group has no significant concentration of credit risk attributable to its trade receivables as the exposure is spread over a large number of customers.

21. Cash and cash equivalents

	2016 $ million	2015 $ million
Cash at bank and in hand	91.1	97.0
Short-term bank deposits	5.0	5.0
	96.1	102.0

Cash at bank and in hand earns interest at floating interest rates. Of this balance $5.0 million (2015 $5.0 million) is callable at notice of between seven and 35 days.

Short-term bank deposits are made for varying periods of between one day and three months depending on the cash requirements of the Group and earn interest at the short-term deposit rates appropriate for the term of the deposit and currency.

At the end of 2016 the currency split of cash and cash equivalents was US dollar 73 per cent (2015 60 per cent), sterling 22 per cent (2015 28 per cent) and other currencies 5 per cent (2015 12 per cent).

For the purposes of the cash flow statement, cash and cash equivalents comprise the above amounts.

At 31 December 2016 $0.1 million (2015 $0.1 million) of non-current cash was held as a property deposit.

22. Trade and other payables – current

	2016 $ million	2015 $ million
Trade payables	**21.0**	15.7
Payments received on account	**2.7**	1.3
Other taxes and social security costs	**3.0**	3.1
Accruals	**41.1**	43.0
Deferred income	**59.4**	60.3
	127.2	123.4

Trade payables are non-interest bearing and are normally settled on 30 to 60 day terms. Other payables are non-interest bearing.

The directors consider that the carrying amount of trade payables approximates their fair value.

Other financial liabilities – current

	2016 $ million	2015 $ million
Other financial liabilities	**0.1**	–

Other financial liabilities comprises forward foreign currency exchange contracts.

23. Deferred tax

The movements in the deferred tax assets/(liabilities) are as follows:

$ million

	Notes	Temporary differences	Tax losses	Tax credits	UK pension plans	Total
At 1 January 2015		1.9	13.2	–	2.9	18.0
Charged/(credited) in the year	11	4.1	(0.3)	2.0	(0.6)	5.2
Deferred tax on defined benefit pension plan	11	–	–	–	1.8	1.8
Deferred tax on share incentives recognised in equity	11	0.1	–	–	–	0.1
Acquisitions	33	(0.1)	0.1	–	–	–
Exchange adjustment		–	–	–	(0.1)	(0.1)
At 1 January 2016		**6.0**	**13.0**	**2.0**	**4.0**	**25.0**
Charged/(credited) in the year	11	**12.7**	**(4.5)**	**1.9**	**(1.2)**	**8.9**
Deferred tax on defined benefit pension plan	11	**–**	**–**	**–**	**0.4**	**0.4**
Deferred tax on share incentives recognised in equity	11	**(0.1)**	**–**	**–**	**–**	**(0.1)**
Exchange adjustment		**(0.3)**	**(0.3)**	**–**	**(0.6)**	**(1.2)**
At 31 December 2016		**18.3**	**8.2**	**3.9**	**2.6**	**33.0**
Amounts on the balance sheet:						
At 31 December 2015						
Deferred tax asset		7.9	11.7	2.0	4.0	25.6
Deferred tax liability		(1.9)	1.3	–	–	(0.6)
		6.0	13.0	2.0	4.0	25.0
At 31 December 2016						
Deferred tax asset		**18.5**	**8.1**	**3.9**	**2.6**	**33.1**
Deferred tax liability		**(0.2)**	**0.1**	**–**	**–**	**(0.1)**
		18.3	**8.2**	**3.9**	**2.6**	**33.0**

A deferred tax asset of $33.1 million has been recognised at 31 December 2016 (2015 $25.6 million). $3.7 million is in the United Kingdom (2015 $6.8 million), $28.2 million is in the United States (2015 $17.7 million) and $1.2 million is in the rest of the world (2015 $1.1 million).

The deferred tax asset includes $0.5 million (2015 $0.6 million) in respect of the tax deduction which may be available on the future exercise of share incentives.

Excluding the United Kingdom, deferred tax assets on temporary differences and tax losses/credits of $14.3 million (2015 $13.5 million) have not been recognised. $8.5 million is in the United States (2015 $8.9 million) and $5.8 million is in the rest of the world (2015 $4.6 million).

23. Deferred tax continued

The Group has tax losses arising in the United Kingdom of $37.1 million (2015 $47.2 million) that are available for offset against suitable future taxable profits. The significant decrease is mostly due to adverse foreign exchange movements. A deferred tax asset has not been recognised in respect of these losses as their future recovery is uncertain. United Kingdom tax losses can be carried forward until 2021 through 2035. In total deferred tax assets amounting to $20.6 million (2015 $22.0 million) have not been recognised.

The Group also has capital losses carried forward of $1,020.9 million (2015 $1,218.5 million) for which no deferred tax asset has been recognised on the balance sheet. This decrease is due to adverse foreign exchange movements. These capital losses have no expiry date.

Future changes in tax rates

The Finance Bill 2016 was enacted 15 September 2016 and reduced the United Kingdom rate of corporation tax from 20 per cent as of 1 April 2017 to 19 per cent and by a further 2 per cent to 17 per cent from April 2020. No further United Kingdom corporation tax rate reductions have been announced. As such, the United Kingdom temporary differences have been recognised at the rate at which the temporary differences are expected to unwind.

In line with these rate changes, deferred tax assets and liabilities being realised or settled before 2020 have been based on a rate of 19 per cent. Those being realised or settled after 2020 have been based on a rate of 17 per cent.

24. Trade and other payables – non-current

	2016 $ million	2015 $ million
Other payables	2.6	1.8
Accruals	3.1	4.0
Deferred income	11.2	14.4
	16.9	20.2

25. Other financial liabilities – non-current

	2016 $ million	2015 $ million
Put option	–	2.6

A financial liability of $2.6 million (Euro 2.4 million) was recorded in 2015 to reflect the fair value of the exercise price of the put and call option over the minority stake of 42 per cent of the share capital of Spirent Technologies GmbH (formerly Testing Technologies). The option was exercised in January 2016.

26. Provisions

	Lease provisions	Restructuring provisions	Other provisions	Total ($ million)
At 1 January 2015	3.6	2.6	2.1	8.3
Charged in the year	0.5	8.8	–	9.3
Asset retirement obligation	0.6	–	–	0.6
Released in the year	(0.7)	(0.6)	(0.4)	(1.7)
Utilised in the year	(1.1)	(3.7)	(0.2)	(5.0)
Exchange difference	(0.1)	(0.1)	–	(0.2)
At 1 January 2016	2.8	7.0	1.5	11.3
Charged in the year	0.5	3.2	–	3.7
Asset retirement obligation	0.1	–	–	0.1
Released in the year	(0.1)	(0.1)	–	(0.2)
Utilised in the year	(0.2)	(7.8)	–	(8.0)
Exchange difference	–	–	(0.1)	(0.1)
At 31 December 2016	3.1	2.3	1.4	6.8

26. Provisions continued

	2016 $ million	2015 $ million
Current	**4.2**	8.9
Non-current	**2.6**	2.4
	6.8	11.3

The lease provisions are for the continuing obligations under leases in respect of space which has been vacated by the Group and property dilapidation and restoration provisions. Where material, lease obligations are discounted. The Group expects these provisions to be utilised over one to eight years.

Restructuring provisions relate to severance costs which are expected to be utilised within one year.

Other provisions are mainly environmental provisions related to property disposed of. The Group expects these provisions to be utilised in less than one year.

27. Financial instruments and financial risk management

The main purpose of the Group's financial instruments, other than trade receivables, trade payables and provisions, is to fund the Group's liquidity requirements.

All of the Group's financial assets and liabilities are categorised as loans and receivables stated at amortised cost and these are shown in the following table:

	Notes	2016 $ million	2015 $ million
Non-current cash on deposit	21	**0.1**	0.1
Non-current trade and other receivables	20	**4.1**	4.1
Cash and cash equivalents	21	**96.1**	102.0
Current trade and other receivables	20	**115.4**	116.4
Financial assets		**215.7**	222.6
Non-current other payables and accruals	24	**5.7**	5.8
Current trade payables and accruals	22	**62.1**	58.7
Current other financial liabilities	22	**0.1**	–
Non-current other financial liabilities	25	**–**	2.6
Provisions	26	**6.8**	11.3
Financial liabilities		**74.7**	78.4

The Group enters into derivative transactions, forward foreign currency exchange contracts, for the management of the Group's foreign currency exposures when deemed appropriate. These derivative financial instruments are measured at fair value.

The key objective of the Group's treasury department is to manage the financial risks of the business and to ensure that sufficient liquidity is available to the Group. All treasury activity operates within a formal control framework. The Board has approved treasury policies and guidelines and periodically reviews treasury activities. Additionally, it is the Group's policy that speculative treasury transactions are expressly forbidden.

27. Financial instruments and financial risk management continued

a) Market risk

The main types of market risk that affect the Group are interest rate risk and exchange rate risk.

Interest rate risk

The Group has no external debt and has limited exposure to interest rate risk. The Group's excess funds are principally held in the United Kingdom and the United States and invested in on-demand or short-term bank deposits. It therefore has some exposure to interest rate risk arising on changes in sterling and US dollar interest rates.

Cash and cash equivalents, long-term cash on deposit and forward foreign currency exchange contracts are the Group's financial instruments which are exposed to interest rate risk.

Short-term bank deposits and forward foreign currency exchange contracts mature within three months. The financial instruments bear the following interest rates:

	2016		2015	
	Effective interest rate %	$ million	Effective interest rate %	$ million
Fixed rate				
Fixed deposits	0.98	5.0	0.40	5.0
Floating rate				
Cash at bank and in hand		91.1		97.0

Interest rates on financial instruments classified as fixed rate are fixed until the maturity of the instrument. All fixed rate deposits mature within three months after which date they will be exposed to floating rates of interest.

Interest receivable for the year was $0.3 million (note 7) (2015 $0.4 million) and is under the effective interest method.

The other financial instruments of the Group that are not included in the above table are non-interest bearing and are therefore not subject to interest rate risk.

A movement of 25 basis points in interest rates based on levels of investment at 31 December 2016 would increase or reduce interest income and equity by $0.1 million (2015 $0.1 million).

Exchange rate risk

Currency exposures arise from trading transactions undertaken by the Group in foreign currencies and on the translation of the operating results and net assets of overseas subsidiaries.

The Group has the majority of its operations in the United States and presents its consolidated financial statements in US dollars. The Company's functional currency is sterling and its share capital is denominated in pounds sterling; the Group also has operations in Europe and Asia and therefore its results and assets and liabilities are affected on translation by movements in exchange rates in relation to the US dollar. The Group does not enter into instruments to hedge the translation exposure of the operating results or net assets of its overseas subsidiaries since these are considered accounting and not cash exposures.

The Group undertakes transactions denominated in foreign currencies; consequently exposures to exchange rate fluctuations arise. Exchange rate exposures are managed within approved policy parameters using forward foreign currency exchange contracts. The main exposures arise in relation to US dollar receivables and cash balances held by non-US operations. Group treasury, by means of forward foreign currency exchange contracts, carries out transaction hedging. A 10 per cent appreciation or depreciation of sterling and euro against the US dollar would increase or reduce profit before tax by $1.5 million (2015 $1.2 million) based on the balances at the reporting date.

27. Financial instruments and financial risk management continued

b) Credit risk

Investment counterparties are subject to pre-approval by the Board with pre-approved limits set for each bank to avoid any concentrations of credit risk.

The maximum credit exposure at the balance sheet date under financial instruments in relation to cash and bank deposits is equal to the carrying value of $96.1 million (2015 $102.0 million).

Trade receivables, which generally have 30 to 90 day terms, are carried at original invoice amount less an allowance for uncollectable amounts where appropriate. Trade receivable exposures are managed in the business units where they arise. Allowance is made for bad and doubtful debts based on management's assessment of the risk taking into account ageing profile, experience and circumstance.

The Group has no significant concentration of credit risk attributable to its trade receivables as the exposure is spread over a large number of customers with no one customer accounting for more than 10 per cent of total Group revenue. The maximum credit exposure at the balance sheet date in relation to trade receivables is equal to the carrying value of $112.2 million (2015 $111.1 million).

The composition of trade receivables at 31 December is as follows:

	2016 $ million	2015 $ million
Neither impaired nor past due	**69.1**	68.5
Past due but not impaired:		
Less than 30 days overdue	**18.5**	20.7
30 to 60 days	**12.5**	10.8
Over 60 days	**12.1**	11.1
Trade receivables	**112.2**	111.1

The Group closely monitors amounts due from customers and performs activities such as credit checks and reviews of payment history and has put in place appropriate credit approval limits. Based on these procedures management assessed the quality of those receivables that are past due but not impaired as low risk.

The movement on the receivables provision during the year is given in note 20. The value of impaired trade receivables is $2.3 million (2015 $1.4 million). For all other financial assets the maximum exposure to credit risk is represented by the carrying amount.

c) Liquidity risk

The Group's objective is to ensure that there are sufficient sources of funding to meet projected requirements. Its operations are financed through cash and cash equivalents held centrally and cash generated from operations.

At 31 December 2016 the Group had cash and cash equivalents of $96.1 million (2015 $102.0 million) of which $91.1 million (2015 $97.0 million) is available on demand and $5.0 million matures within three months (2015 $5.0 million matures within three months).

During 2016 the Group generated $42.7 million of cash from operating activities (2015 $60.4 million) and considers that with current cash resources, no debt and positive cash flow from its operating activities it has adequate resources available to it to remain in operational existence for the foreseeable future.

The Group has entered into forward foreign currency exchange contracts all of which mature within three months. The gross settlement amounts of these contracts are as follows:

	2016 $ million	2015 $ million
Sale of US dollars against sterling	**5.0**	4.4

The Group is debt free and does not have loans payable. Financial liabilities are trade and other payables, the majority of which are all due to be settled within one year, and provisions (note 26). In 2015, the Group had a liability in respect of a put and call option with a fair value of $2.6 million which was settled in 2016 (see note 25).

The Group does not have any other material financial contractual commitments.

d) Fair value of financial instruments

The carrying value of all financial assets and liabilities is a reasonable approximation of fair value.

Derivative financial instruments are stated at fair value although the amounts at 31 December 2016 and 2015 were immaterial.

27. Financial instruments and financial risk management continued

e) Capital management

The primary objective of the Group's capital management is to support its business and maximise shareholder value. The Group's capital is its total shareholders' funds.

The Group manages its capital structure and makes adjustments to it in the light of changes in economic conditions.

Spirent's policy on the payment of dividends to shareholders is to maintain a sustainable dividend.

28. Operating lease commitments

At 31 December, the Group had outstanding commitments for future minimum lease payments under non-cancellable operating leases, which fall due as follows:

	2016 $ million	2015 $ million
Within one year	**9.1**	9.0
In the second to fifth years	**29.0**	29.0
Over five years	**12.6**	18.2
	50.7	56.2

The Group leases certain land and buildings under non-cancellable operating lease agreements with a variety of terms. The Group also leases certain plant and equipment under non-cancellable operating lease agreements.

29. Equity

a) Issued share capital

Issued and fully paid Ordinary Shares of 3⅓ pence each:

	Number of Ordinary Shares million	$ million
At 1 January 2015	611.7	31.8
Exchange adjustment		(1.6)
At 1 January 2016	611.7	30.2
Exchange adjustment		(4.9)
At 31 December 2016	611.7	25.3

In 2016 no Ordinary Shares were transferred from the Spirent Employee Share Ownership Trust ("ESOT") to satisfy options exercised under the 2005 Employee Incentive Plan (2015 0.1 million Ordinary Shares).

b) Equity and reserves

The nature and purpose of each reserve within equity is as follows:

- Share premium account: this reserve records the consideration premium for shares issued at a value that exceeds their nominal value;
- Capital redemption reserve: this reserve arises in relation to share capital cancellation;
- Other reserves: share capital, share premium account and capital redemption reserve are translated into US dollars at the rates of exchange at the balance sheet date and the resultant exchange differences are included in other reserves; and
- Translation reserve: this reserve is used to record exchange differences arising from the translation of the financial statements of foreign subsidiaries.

Investment in own Ordinary Shares

At 31 December 2016, the ESOT held 0.6 million Ordinary Shares (2015 0.6 million Ordinary Shares) to satisfy awards under various share incentive plans. At 31 December 2016, the Spirent Sharesave Trust held 0.5 million Ordinary Shares (2015 0.5 million Ordinary Shares) to satisfy awards made to United Kingdom based employees under an all employee share scheme. The market value of own Ordinary Shares held in trust, being in total 1.1 million Ordinary Shares (2015 1.1 million Ordinary Shares), at 31 December 2016 was $1.3 million (2015 $1.2 million).

30. Employee share plans

Movements in share incentives over a two-year period ending on 31 December 2016 are shown below:

	2005 Employee Incentive Plan[1]		Spirent Long-Term Incentive Plan[2]	
	Number of share incentives million	Weighted average exercise price pence	Number of share incentives million	Weighted average exercise price pence
Incentives outstanding at 31 December 2014	6.6	63	–	–
Exercised	(0.1)	52	–	–
Granted	4.8	52	–	–
Forfeited	(1.6)	74	–	–
Incentives outstanding at 31 December 2015	**9.7**	**56**	**–**	**–**
Exercised	**(0.1)**	**48**	**–**	**–**
Granted	**–**	**–**	**4.1**	**–**
Forfeited	**(2.9)**	**62**	**(0.2)**	**–**
Incentives outstanding at 31 December 2016	**6.7**	**53**	**3.9**	**–**
Incentives exercisable				
At 31 December 2015	0.1	48	–	–
At 31 December 2016	**–**	**–**	**–**	**–**

Notes
1 Figures for the 2005 Employee Incentive Plan include share options, stock appreciation rights and Performance Shares in aggregate.
2 Figures for the Spirent Long-term Incentive Plan include restricted stock and Performance Shares in aggregate.

The weighted average share price at exercise date was 83.0 pence (2015 78.0 pence).

The following information relates to outstanding share incentives at 31 December 2016:

					2016			2015
Share plan	**Exercise period (as at 31 December)**	**Range of exercise prices pence**	**Weighted average exercise price pence**	**Number of share incentives outstanding million**	**Weighted average remaining contractual life years**	Weighted average exercise price pence	Number of share incentives outstanding million	Weighted average remaining contractual life years
2005 Employee Incentive Plan	**28.04.14-17.05.25**	**0-72**	**1**	**2.9**	**7.9**	1	4.4	8.6
	28.04.14-10.08.25	**87-101**	**93**	**3.8**	**7.9**	101	5.3	8.6
Spirent Long-term Incentive Plan	**16.06.16-12.12.26**	**–**	**–**	**3.9**	**9.5**	–	–	–
				10.6			9.7	

30. Employee share plan continued

Discretionary plans

Spirent Long-Term Incentive Plan ("LTIP")

The LTIP, which was approved by shareholders at the 2016 AGM, is available for selected employees, including executive directors, on a discretionary basis.

Under the LTIP, the Company is able to grant share options, including HMRC-approved options, share settled stock appreciation rights ("SARs"), Performance Shares and Restricted Stock. No price is payable on the grant of an award.

In normal circumstances, LTIP awards vest three years following the date of grant provided the relevant performance conditions have been met. For Performance Share awards, performance conditions related to Total Shareholder Return ("TSR") and the Company's earnings per share ("EPS"). For Restricted Stock, the performance conditions relate to the recipient's continued employment with the Company.

Further information on the performance conditions for LTIP share incentives is set out in the Report on directors' remuneration.

2005 Employee Incentive Plan ("EIP")

The EIP closed for new awards following the 2016 AGM and was replaced by the Spirent Long-term Incentive Plan.

The EIP, which was approved by shareholders and introduced in 2005, was available for selected employees, including executive directors, on a discretionary basis.

Under the EIP, the Company was able to grant share options, including HMRC-approved options, share settled stock appreciation rights ("SARs") and Performance Shares. No price was payable on the grant of an award.

In normal circumstances, EIP awards vest three years following the date of grant provided the relevant performance conditions have been met. For share options and SARs, the performance conditions relate to the Company's earnings per share ("EPS"). For Performance Share awards made prior to 2011, performance conditions related to Total Shareholder Return ("TSR"). For awards made since 2011, performance conditions relate to the Company's EPS and TSR.

Further information on the performance conditions for EIP share incentives is set out in the Report on directors' remuneration.

Options and SARs granted under the EIP expire on the tenth anniversary of their grant unless they have previously lapsed or been exercised.

All employee plans

UK Employee Share Purchase Plan ("UK ESPP")

The UK ESPP, which is an HMRC-approved share incentive plan, was approved by shareholders in 2005 and 2015 and is available to all UK employees. The UK ESPP offers four ways to provide Ordinary Shares to employees: free shares, partnership shares, matching shares and dividend shares. The UK ESPP operates in conjunction with a trust, which holds the shares on behalf of participants.

In November 2010, the Company commenced making invitations to all UK employees to acquire partnership shares on market using deductions from payroll.

US Employee Stock Purchase Plan ("US ESPP")

The US ESPP was initially approved by shareholders in 2000, with amendments being approved by shareholders in 2005 and 2011.

The US ESPP enables the Company to invite all US employees to acquire Ordinary Shares in the Company on market using deductions from payroll. In November 2010, the Company commenced making six-monthly invitations to employees.

The US ESPP also enables the Company to grant eligible US employees the right to acquire Ordinary Shares in the Company using the proceeds of a savings contract. If such a grant were made, when joining the US ESPP, participants would enter into a 12 month contract to save up to 15 per cent of base salary subject to an individual limit of $1,000 per month. No grants of this nature have been made since 2003.

Global All Employee Share Purchase Plan ("GAESPP")

The GAESPP was initially approved by shareholders in 2001 with amendments being approved by shareholders in 2005 and 2011. The GAESPP enables the Company to invite employees in countries other than the US or UK to acquire Ordinary Shares in the Company on market using deductions from payroll. In September 2011, the first such invitation was made to all employees in Canada, Hong Kong, France and Germany and subsequent invitations have been made on a six-monthly basis since 2012.

The GAESPP can also be operated on similar terms to the US ESPP above, with participants entering into a 12 month contract to save up to 15 per cent of base salary subject to an individual limit. No grants of this nature have been made since 2003.

31. Share-based payment

	2016 $ million	2015 $ million
2005 Employee Incentive Plan	0.2	0.8
Spirent Long-term Incentive Plan	0.6	–
	0.8	0.8

All schemes are equity-settled.

4.1 million share incentives were granted during 2016 (2015 4.8 million). The fair value of share incentives has been estimated as at the date of grant using the Hull-White trinomial model. The following table gives the assumptions made in arriving at the share-based payment charge and the fair value:

	2016	2015
Weighted average share price (pence)	76.5	88.1
Weighted average exercise price (pence)	–	51.8
Weighted average fair value (pence)	68.6	41.0
Expected volatility (%)	34-40	40-41
Option life (years)		
Performance Shares	3.0	3.0
Options and SARs	10.0	10.0
Suboptimal exercise factor	1.5	1.5
Risk free rate (%)	0.8-1.5	1.6-2.1
Dividend yield (%)	3.2	2.6

The expected volatility was determined by calculating the historical volatility of the Company's share price over the previous two years which management considers to be the period which is likely to be most representative of future volatility. The risk free rate is calculated by reference to UK government bonds.

32. Reconciliation of (loss)/profit before tax to cash generated from operations

	2016 $ million	2015 $ million
(Loss)/profit before tax	(46.0)	9.6
Adjustments for:		
Finance income	(0.3)	(0.4)
Finance costs	0.7	0.5
Share of loss of associate	4.5	0.4
Intangible asset amortisation and impairment	21.5	15.9
Goodwill impairment	61.4	3.8
Depreciation of property, plant and equipment	19.1	25.0
Loss on the disposal of property, plant and equipment	0.2	0.8
Share-based payment	0.8	0.8
Changes in working capital		
Deferred income (released)/received	(2.6)	1.8
Increase in receivables	(1.7)	(7.9)
(Increase)/decrease in inventories	(4.5)	3.4
Increase in payables	4.9	4.8
(Decrease)/increase in provisions	(4.5)	2.6
Defined benefit pension plan	(6.1)	(3.3)
Cash flow from operations	47.4	57.8

33. Business combinations

There were no acquisitions in 2016.

The following acquisition was completed in 2015.

Epitiro Group Limited

On 16 November 2015, Spirent completed the acquisition of 100 per cent of the share capital of Epitiro Group Limited, a company based in Cardiff, Wales, for an initial cash consideration of $1.7 million. Epitiro develops active Wi-Fi testing solutions for leading internet service providers, carriers and enterprises. Epitiro is reported within the Group's Service Assurance division.

	Epitiro $ million
Intangible assets	0.8
Trade and other receivables	0.1
Trade and other payables	(0.2)
Total identifiable net assets	0.7
Goodwill	1.3
	2.0
Consideration:	
Initial cash consideration	1.7
Contingent consideration accrued	0.3
	2.0
Cash flows:	
Initial cash consideration	1.7

For trade and other receivables the gross contractual amounts were $0.1 million.

The intangible assets acquired represented software technology, customer lists and brands and these were assigned provisional lives of between five to six years.

Acquisition related costs were $0.1 million and these were expensed to administration costs.

The Group paid $0.1 million of contingent consideration during 2016 in relation to the 2015 acquisition of Epitiro Group Limited. The remaining $0.2 million of contingent consideration will not be paid as the relevant targets were not met.

34. Related party transactions

Transactions between the Company and its subsidiaries, which are related parties, have been eliminated on consolidation and are not disclosed in this note.

Remuneration of key management personnel

The remuneration of the directors, who are the key management personnel of the Group, is set out below in aggregate for each of the categories specified in IAS 24:

	2016 $000	2015 $000
Short-term employee benefits	2,206.3	1,767.8
Share-based payment	218.2	165.5
	2,424.5	1,933.3

No director received compensation for loss of office (2015 $nil).

There were gains of $29,000 (2015 $23,000) on the exercise of options by key management personnel in 2016.

PARENT COMPANY BALANCE SHEET

At 31 December 2016

	Notes	2016 £ million	2015 £ million
Fixed assets			
Intangible assets	4	**2.4**	2.4
Tangible assets	5	**1.6**	1.1
Investments	6	**338.7**	347.2
		342.7	350.7
Current assets			
Stocks	7	**1.4**	1.8
Debtors	8	**22.1**	11.7
Cash at bank and in hand		**20.2**	22.2
		43.7	35.7
Creditors: amounts falling due within one year	9	**(92.0)**	(83.0)
Net current liabilities		**(48.3)**	(47.3)
Total assets less current liabilities		**294.4**	303.4
Defined benefit pension plan deficit	3	**(10.9)**	(13.4)
Net assets		**283.5**	290.0
Capital and reserves	13		
Called up share capital		**20.4**	20.4
Share premium account		**20.2**	20.2
Capital redemption reserve		**13.1**	13.1
Profit and loss account		**229.8**	236.3
Shareholders' funds – equity		**283.5**	290.0

The Company has taken advantage of the exemption under Section 408 of the Companies Act 2006 from presenting its own profit and loss account. In 2016, the profit for the year amounted to £11.6 million (2015 £19.5 million).

The notes on pages 138 to 150 form part of these financial statements.

Signed on behalf of the Board

Paula Bell
Director
2 March 2017

PARENT COMPANY STATEMENT OF CHANGES IN EQUITY
At 31 December 2016

	Notes	Attributable to the equity holders of the parent Company				£ million
		Called up share capital	Share premium account	Capital redemption reserve	Profit and loss account	Total equity
At 1 January 2015		20.4	20.2	13.1	236.4	290.1
Profit for the year		–	–	–	19.5	19.5
Other comprehensive income (a)		–	–	–	(4.8)	(4.8)
Total comprehensive income		–	–	–	14.7	14.7
Share-based payment		–	–	–	0.5	0.5
Equity dividends	12	–	–	–	(15.3)	(15.3)
At 1 January 2016		**20.4**	**20.2**	**13.1**	**236.3**	**290.0**
Profit for the year		**–**	**–**	**–**	**11.6**	**11.6**
Other comprehensive income (b)		**–**	**–**	**–**	**(1.2)**	**(1.2)**
Total comprehensive income		**–**	**–**	**–**	**10.4**	**10.4**
Share-based payment		**–**	**–**	**–**	**0.6**	**0.6**
Equity dividends	12	**–**	**–**	**–**	**(17.5)**	**(17.5)**
At 31 December 2016		**20.4**	**20.2**	**13.1**	**229.8**	**283.5**

(a) The amount included in other comprehensive income for 2015 of £4.8 million represents re-measurement losses of the net defined benefit pension liability of £6.0 million net of a tax credit of £1.2 million.
(b) The amount included in other comprehensive income for 2016 of £1.2 million represents re-measured losses of the net defined benefit pension liability of £1.6 million net of a tax credit of £0.4 million.

The notes on pages 138 to 150 form part of these financial statements.

1. Significant accounting policies

Corporate information

Spirent Communications plc is a public limited company incorporated and domiciled in England and Wales (registration number 00470893). The registered address of the Company is Northwood Park, Gatwick Road, Crawley, West Sussex, RH10 9XN, United Kingdom.

Basis of accounting

The financial statements have been prepared in accordance with Financial Reporting Standard 101 Reduced Disclosure Framework ("FRS 101").

In preparing these financial statements, the Company applies the recognition, measurement and disclosure requirements of International Financial Reporting Standards as adopted by the EU ("Adopted IFRSs"), but makes amendments where necessary in order to comply with Companies Act 2006 and has set out below where advantage of the FRS 101 disclosure exemptions have been taken.

- A Cash Flow Statement and related notes;
- Comparative period reconciliations for share capital, tangible fixed assets and intangible assets;
- Disclosures in respect of transactions with wholly owned subsidiaries;
- Disclosures in respect of capital management;
- The effects of new but not yet effective IFRSs; and
- Disclosures in respect of the compensation of Key Management Personnel

As the consolidated financial statements include the equivalent disclosures, the Company has also taken the exemptions under FRS 101 available in respect of the following disclosures:

- IFRS 2 in respect of Group settled share based payments;
- Certain disclosures required by IAS 36 in respect of the impairment of goodwill and indefinite life intangible assets; and
- The disclosures required by IFRS 7 and IFRS 13 regarding financial instrument disclosures have not been provided apart from those which are relevant for the financial instruments which are held at fair value.

The following exemptions have been taken in these financial statements, as granted by IFRS 1:

- Business combinations – business combinations that took place prior to 1 January 2014 have not been restated.
- Use of previous GAAP carrying amounts as at date of transition as a deemed cost for investment in subsidiaries.

As the Company is included in the consolidated financial statements, made up to 31 December each year, it is not required to present a separate profit and loss account as provided by Section 408 of the Companies Act 2006. Information on fees for non-audit services in respect of the parent Company accounts have not been disclosed as the Company prepares Group accounts which disclose information on fees for non-audit services on a consolidated basis.

Accounting convention

The financial statements are prepared on a historical cost basis apart from certain financial instruments that have been measured at fair value.

Going concern basis of accounting

The directors have reviewed the detailed financial projections for a period of 12 months from the date of this report and the business plans for the 2018 and 2019 financial years. They have also considered the principal risks and uncertainties that the Company faces and its current financial position and are satisfied that the Company has adequate financial resources to continue in operational existence for the foreseeable future, a period of not less than 12 months from the date of this report. Accordingly, the going concern basis of accounting continues to be used in the preparation of the financial statements.

Business combinations and goodwill

Goodwill arising on the acquisition of subsidiaries, representing the excess of cost over the net fair value of the net assets acquired, is capitalised as an intangible asset. Goodwill is carried at cost less any accumulated impairment losses.

For the purpose of impairment testing, goodwill is allocated to the related cash-generating units monitored by management. Where the recoverable amount of the cash-generating unit is less than its carrying amount, including goodwill, an impairment loss is recognised in the profit and loss account.

The UK Companies Act requires goodwill to be reduced by provisions for depreciation on a systematic basis over a period chosen by the directors, its useful economic life. However, under IFRS 3 goodwill is not amortised. Consequently, the Company does not amortise goodwill, but reviews it for impairment on an annual basis or whenever there are indicators of impairment. The Company is therefore invoking a 'true and fair view override' to overcome the prohibition on the non-amortisation of goodwill in the Companies Act.

Had the Company amortised goodwill a period of 20 years would have been chosen as the useful life for goodwill. The profit for the year would have been £0.6 million lower had goodwill been amortised in the year.

1. Significant accounting policies continued

Tangible assets

Tangible assets are stated at cost less accumulated depreciation and accumulated impairment. Depreciation is not provided on freehold land. Depreciation is provided to write-off the cost of all other assets, less residual value, on a straight line basis over their estimated useful lives at rates which take into account commercial conditions at their location. Usual asset lives are as follows:

Freehold buildings	50 years
Plant and machinery	3 to 8 years
Fixtures, fittings and equipment	
Building installations	20 years or lease period if less
Fittings and equipment	3 to 8 years
Motor vehicles	3 to 5 years
Business systems software	4 years

The carrying values of tangible fixed assets are reviewed for impairment if events or changes in circumstances indicate that the carrying value may not be recoverable.

Impairment of assets

Tangible assets with finite useful lives are tested for impairment at each reporting date where there is an indication that an asset may be impaired. Goodwill with an indefinite useful life is assessed at least annually. When an impairment test is performed, the recoverable amount is assessed by reference to the higher of the net present value of the expected cash flows (value in use) of the relevant cash-generating unit or asset and the fair value less cost of disposal. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Where the carrying amount of an asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. Impairment losses are recognised in the profit and loss account in those expense categories consistent with the function of the impaired asset.

Where an impairment loss has been recognised against an asset, it may be reversed in future periods where there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised, but only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, had no impairment loss been recognised in prior years. Such a reversal is recognised in the profit and loss account.

Investments

Investments in subsidiaries are stated at cost and reviewed for impairment if there are indications that the carrying value may not be recoverable.

Leases

Operating leases are leases where the lessor retains substantially all the risks and rewards of ownership of the asset and are not finance leases. Operating lease rentals are charged to the profit and loss account on a straight line basis over the period of the lease.

Stocks

Stocks are valued at the lower of cost and estimated net realisable value, after provisions for obsolescence. Cost includes all costs in bringing each product to its present location and condition, being the full manufacturing cost on a first-in-first-out basis, including all attributable overheads based on a normal level of activity.

Provisions

Provisions are recorded when the Company has a present, legal or constructive obligation as a result of a past event, for which it is probable that it will be required to settle by an outflow of resources and for which a reliable estimate of the amount of the obligation can be made. Provisions are reviewed at each balance sheet date and adjusted to reflect the current best estimate.

Where the effect of the time value of money is material, the amount of the provision shall be the present value of the expenditures expected to be required to settle the obligation.

Foreign currencies

Transactions in foreign currencies are initially recorded at the rates ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the rates ruling at the balance sheet date. All exchange gains and losses are taken to the profit and loss account.

Financial instruments

Financial assets and liabilities are recognised on the Company's balance sheet when it becomes a party to the contractual provisions of the instrument.

1. Significant accounting policies continued

Trade debtors

Trade debtors are non-interest bearing and are stated at original invoiced amount less an appropriate allowance for estimated irrecoverable amounts. Such allowances are based on an assessment of debtor ageing, past experience or known customer exposures.

Trade creditors

Trade creditors are non-interest bearing and are stated at the original invoiced amount.

Loans and borrowings

Loans and borrowings are recognised initally at fair value less attributable transaction costs. Subsequent to initial recognition, loans and borrowings are stated at amortised cost using the effective interest method, and in respect of financial assets, less any impairment losses.

Equity instruments

Equity instruments are recorded at the proceeds received, net of direct issue costs. Spirent Communications plc Ordinary Shares held by the Company are classified in equity as treasury shares and are recognised at cost and included as a deduction from retained earnings. Consideration received for the sale of such treasury shares is also recognised in equity.

Derivative financial instruments and hedge accounting

The Company uses forward foreign currency exchange contracts to manage exposures arising on receipts and payments in foreign currencies relating to firm commitments.

Forward foreign currency exchange contracts are initially recognised at fair value on the date on which the contract is entered into, and are subsequently re-measured to fair value at each reported balance sheet date. The fair value of forward foreign currency exchange contracts is calculated by reference to current forward exchange rates for contracts with similar maturity profiles. The Company has not adopted the hedge accounting rules. Consequently all gains and losses arising from changes in fair value are taken to the profit and loss account.

Derivatives embedded in other financial instruments or other host contracts are treated as separate derivatives when their risks and characteristics are not closely related to those of the host contracts.

Pensions

The Company operates two funded defined benefit pension plans. All other pension plans are defined contribution in nature where the amount charged to the profit and loss account is the employer’s contributions paid or payable during the year.

For defined benefit pension plans full actuarial valuations are carried out every three years using the projected unit credit method, and updates are performed at each balance sheet date. Re-measurement, comprising actuarial gains and losses, the effect of changes to the asset ceiling (if relevant) and the return on plan assets (excluding interest), is reflected immediately in the balance sheet liability or asset with a charge or credit recognised in other comprehensive income in the period in which they occur. Re-measurement recognised in other comprehensive income will not be reclassified to profit or loss. Past service cost is recognised in profit or loss in the period of plan amendment. Net interest is calculated by applying the discount rate at the beginning of the period to the net defined benefit pension liability or asset, taking account of any changes in the net defined benefit pension liability during the period as a result of contribution and benefit payments. Defined benefit pension costs are categorised as:

- Service cost (including current service cost, past service cost and gains and losses on curtailments or settlements);
- Net interest expense or income; and
- Re-measurement.

The Company presents the first two components of defined benefit pension costs in profit or loss.

Revenue recognition

Revenue is recognised when it is probable that economic benefits will flow to the Group, the revenue can be reliably measured and when the Group has transferred to the buyer the significant risks and rewards of ownership. In addition, revenue is only recognised when collectability is probable.

For the sale of services, revenue is recognised in accounting periods in which the service is rendered. Revenue from maintenance contracts is recognised over the period of performance on a straight line basis.

1. Significant accounting policies continued

Revenue from product sales of hardware and software is recognised at the time of delivery and acceptance and when there are no significant vendor obligations remaining. It is not until acceptance has occurred that the risks and rewards of ownership are transferred to the buyer. Terms of acceptance are dependent upon the specific contractual arrangement agreed with the customer.

Revenue from sales or usage-based royalties is recognised as the subsequent sale or usage occurs.

Contractual arrangements are accounted for as two or more separate transactions only where the commercial substance is that the individual components operate independently of each other, because they are capable of being provided separately from one another and it is possible to attribute reliable fair values to every component. To the extent that a separate component comprises a product sale of hardware or software, revenue is recognised as described above. Revenue is recognised on other components as the Group fulfils its contractual obligations and to the extent that it has earned the right to consideration.

Government grants

A government grant is recognised in the balance sheet initially as deferred income when there is reasonable assurance that it will be received and that the Company will comply with the conditions attached to it. Grants that compensate the Company for expenses incurred are recognised as other operating income on a systematic basis in the same periods in which expenses are incurred. Grants that compensate the Company for the acquisition of an asset are presented by deducting them from the acquisition cost of the related asset in accordance with IAS 20.

Product development

Research expenditure is recognised in the year in which it is incurred. Intangible assets arising on the Group's various product development projects are recognised only if the recognition criteria of IAS 38 "Intangible Assets" are met.

Product development costs are expensed as incurred until the technological feasibility of the product under development has been established. Technological feasibility in Spirent's circumstances occurs when a working model is completed. For software development technological feasibility is not established until the process of developing the software is complete. After technological feasibility is established, additional costs are capitalised and amortised on a straight line basis over the estimated useful life.

At 31 December 2016 and 31 December 2015 no amounts have met the recognition criteria.

Employee benefits

When an employee has rendered service to the Company during an accounting period, short-term benefits expected to be paid in exchange for that service are recognised in the same accounting period.

Share-based payment

The cost of equity-settled transactions with employees is measured by reference to the fair value at the date at which they are granted. The fair value is determined using the Hull-White trinomial model.

The cost of equity-settled transactions is recognised as a cost to the Company or as an addition to the cost of investment in the subsidiary in which the relevant employees work, over the vesting period of the equity-settled transactions with a corresponding adjustment to reserves. Any payments received from the Company's subsidiaries in respect of these share-based payments result in a reduction in the cost of investment.

No expense is recognised for awards that do not ultimately vest, except for awards where vesting is conditional upon a market condition, which are treated as vesting irrespective of whether or not the market condition is satisfied, provided that all other vesting conditions are satisfied.

Where the terms of an equity-settled award are modified, as a minimum an expense is recognised as if the terms had not been modified. In addition, an expense is recognised for any increase in the value of the transaction as a result of the modification, as measured at the date of modification.

Where an equity-settled award is cancelled, it is treated as if it had vested on the date of cancellation and any expense not yet recognised for the award is recognised immediately. However, if a new award is substituted for the cancelled award and designated as a replacement award on the date that it is granted, the cancelled and new awards are treated as if they were a modification of the original award, as described in the previous paragraph.

The Company has an employee share trust for the granting of certain share incentives to employees. Shares are held by the employee share trust, treated as treasury shares and presented in the balance sheet as a deduction from equity.

Tax

Income tax on the profit or loss for the year comprises current and deferred tax. Income tax is recognised in the profit and loss account except to the extent that it relates to items in other comprehensive income or equity.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the balance sheet date, and any adjustments to tax payable for previous years.

1. Significant accounting policies continued

Deferred tax is recognised on all temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements, with the following exceptions:

- where the temporary difference arises from the initial recognition of goodwill (taxable temporary differences only) or of an asset or liability in a transaction that is not a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss;
- in respect of taxable temporary differences associated with investments in subsidiaries, associates and joint ventures, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

A deferred tax asset is recognised only to the extent that it is probable that taxable profits will be available against which the deductible temporary differences, carried forward tax credits or tax losses can be utilised.

Deferred tax assets and liabilities are measured on an undiscounted basis at the tax rates that are expected to apply when the related asset is realised or the liability is settled, based on tax rates and laws enacted or substantively enacted at the balance sheet date.

Dividends paid

The interim dividend is included in the financial statements in the period in which it is paid, and the final dividend in the period it is approved by the shareholders at an annual general meeting.

Critical accounting assumptions and estimates

The preparation of financial statements requires the Company to make estimates and assumptions that affect items reported. Such estimates and assumptions are based on management's best knowledge of current facts, circumstances and future events, actual results may differ, possibly significantly, from those estimates. The areas requiring high degree of judgement or where assumptions and estimates are significant to the parent Company financial statements are revenue recognition, defined benefit pension plans (note 3) and recognition of deferred tax assets (note 10). Please refer to note 2 of Notes to the consolidated financial statements on page 106 for detailed disclosures.

2. Employees

Please refer to the Report on directors' remuneration on pages 64 to 83 and note 34 of Notes to the consolidated financial statements on page 135 for disclosures relating to the emoluments, share incentives and long-term incentive interests and pensions of the directors.

3. Pensions

Defined benefit plans

i) Characteristics and risks associated with the Plans

The Company sponsors two funded defined benefit pension plans in the United Kingdom: the Spirent Communications plc Staff Pension & Life Assurance Plan ("Staff Plan") and the Spirent Communications plc Retirement Cash & Life Assurance Plan ("Cash Plan"). These plans are funded and have full UK HM Revenue & Customs ("HMRC") tax-exempt approval. Both schemes are administered by a trustee board which is comprised of representatives from the employer, member nominated trustees and an independent trustee. The trustee board operates in accordance with the Trust Deed and Rules of each Plan and acts in the interests of all of its members.

The Staff Plan is the Company's most significant plan, and it provides its members with retirement benefits based on their final salary and length of service. The Staff Plan was closed to new entrants on 1 October 2002.

The Cash Plan is primarily a defined contribution arrangement, although there are some legacy defined benefits (Old Section) that have been valued for the purpose of these accounts in accordance with IAS 19. Members who left service before 1992 are entitled to a cash lump sum on retirement that is based on their salary and length of service. Members of the Old Section are entitled to defined contribution benefits, but with an underpin based on salary and length of service.

There is also a United Kingdom unfunded plan, which consists of a contractual obligation for the Company to top up certain former employees' benefits whose salaries exceeded the statutory earnings cap.

As with the vast majority of similar arrangements in the United Kingdom, the Company ultimately underwrites the risks relating to the defined benefit plans. These risks include investment risks and demographic risks, such as the risks of members living longer than expected.

The plans hold a significant proportion of their assets in equity. Strong future equity returns would be expected to reduce the Company's future cash contributions (and vice versa).

Expected contributions to the defined benefit plans in 2017 are £5.1 million. This includes the contributions agreed with the funded plans' trustees in accordance with UK legislation. Following the triennial valuations as at 1 April 2015, the Group has agreed to pay £5.0 million per annum into the Staff Plan from 1 July 2016, over a seven-year period, in order to clear the funding deficit as assessed by the trustees' independent actuary.

If the contributions currently agreed are insufficient to pay the benefits due, the Company will need to make further contributions.

3. Pensions continued

ii) Amounts in the financial statements

The assets and liabilities on the balance sheet are as follows:

	2016 £ million	2015 £ million
Assets		
UK defined benefit pension plan – Cash Plan	0.7	0.8
Liabilities		
UK defined benefit pension plan – Staff Plan	(11.0)	(13.7)
UK unfunded plan	(0.6)	(0.5)
	(11.6)	(14.2)
Net pension plan deficit on the balance sheet	(10.9)	(13.4)

For the purposes of the following disclosures the Staff Plan and Cash Plan have been combined as the Cash Plan is immaterial to these financial statements.

a) The assets and liabilities in each plan

	2016 £ million	2015 £ million
Staff Plan		
Quoted		
Equities	50.3	42.1
Government bonds	3.8	3.1
Unquoted		
LDI funds	26.9	17.7
Cash benchmarked bonds	73.7	60.4
Corporate bonds	2.9	2.2
Hedge funds	15.4	15.8
Insured annuities	2.8	2.8
Property	1.0	1.1
Cash and other	15.1	20.4
Fair value of plan assets	191.9	165.6
Present value of defined benefit pension plan obligations	(202.9)	(179.3)
Deficit in the plan	(11.0)	(13.7)
Cash Plan		
Quoted		
Equities	3.3	2.9
Government bonds	3.0	2.8
Unquoted		
Insured annuities	0.1	0.1
Cash and other	1.8	1.9
Fair value of plan assets	8.2	7.7
Present value of defined benefit pension plan obligations	(7.5)	(6.9)
Surplus in the plan	0.7	0.8
Total net deficit recognised	(10.3)	(12.9)
Unfunded plan		
Present value of unfunded obligations	(0.6)	(0.5)
Net pension plan deficit on the balance sheet	(10.9)	(13.4)

b) Analysis of the amounts charged to the profit and loss account

	2016 £ million	2015 £ million
Plan administration expenses	0.5	0.5
Current service cost	0.1	0.1
Amount charged to operating costs	0.6	0.6
Net interest on the net defined benefit pension liability	0.5	0.3
Net charge to the profit and loss account	1.1	0.9

3. Pensions continued

c) Analysis of amount recognised directly in the statement of comprehensive income

	2016 £ million	2015 £ million
Re-measurement gain/(loss) on plans' assets	23.7	(7.1)
Actuarial gain/(loss) arising from experience	3.2	(3.6)
Actuarial gain arising from the demographic assumptions	6.0	–
Actuarial (loss)/gain arising from changes in financial assumptions	(34.5)	4.7
Re-measurement of the net defined benefit pension liability	**(1.6)**	(6.0)

d) Movements in the present value of funded defined benefit obligations

	2016 £ million	2015 £ million
At 1 January	186.2	188.0
Current service cost	0.1	0.1
Interest cost	6.9	6.7
Benefit payments	(8.1)	(7.5)
Actuarial (gain)/loss arising from experience	(3.2)	3.6
Actuarial gain arising from the demographic assumptions	(6.0)	–
Actuarial loss/(gain) arising from changes in financial assumptions	34.5	(4.7)
Present value of funded defined benefit pension plans' obligations	**210.4**	186.2

e) Movements in the fair value of plans' assets

	2016 £ million	2015 £ million
At 1 January	173.3	179.2
Interest income on plans' assets	6.5	6.4
Employer contributions	5.2	2.8
Benefit payments	(8.1)	(7.5)
Plan administration expenses	(0.5)	(0.5)
Re-measurement gain/(loss) on plans' assets	23.7	(7.1)
Fair value of plans' assets	**200.1**	173.3

f) The key financial assumptions

The assumptions used for both plans using a weighted average were as follows:

	2016 %	2015 %
Inflation – RPI	3.2	2.9
Inflation – CPI	2.1	1.8
Rate of increase in pensionable salaries	2.1	3.0
Rate of increase for pensions in payment pre 2001 service	3.7	3.6
Rate of increase for pensions in payment 2001 to 5 April 2005 service	3.1	2.8
Rate of increase for pensions post 5 April 2005 service	2.1	2.0
Rate of increase in deferred pensions	2.1	1.8
Rate used to discount plan liabilities	2.8	3.8

The mortality assumptions are based on standard mortality tables which allow for future mortality improvements. The assumptions are such that a member currently aged 65 (2015 aged 65) will live on average for a further 23.1 years (2015 23.6 years) if they are male and for a further 25.2 years (2015 25.8 years) if they are female. For a member who retires in 2036 (2015 in 2035) at age 65 (2015 age 65) the assumptions are that they will live on average for a further 24.8 years (2015 24.5 years) after retirement if they are male and for a further 27.1 years (2015 26.9 years) after retirement if they are female.

3. Pensions continued

iii) Amount, timing and uncertainty of future cash flows

The approximate impact to the past service liabilities of changing these main assumptions is as follows:

- Reducing the discount rate by 0.1 per cent per annum would increase past service liabilities by £3.1 million (2015 £2.6 million)
- Increasing RPI inflation by 0.1 per cent would increase the plans' liabilities by £1.2 million (2015 £0.9 million)
- Increasing the life expectancy of a member by one year (by modifying the standard mortality tables using an appropriate scaling factor) would increase past service liabilities by £9.4 million (2015 £7.4 million)

There will also be an impact on the future service cost but given the small active population in these plans this is likely to be insignificant. The sensitivity figures have been calculated to show the movement in the defined benefit obligation for each assumption change in isolation, and assuming no other changes in market conditions at the accounting date and may not be representative of the actual change as the changes in assumptions may not occur in isolation.

The weighted average duration of the defined benefit obligation is 15 years (2015 15 years).

Defined contribution plans

The Company contributes to defined contribution pension plans for employees. Employer contributions for 2016 were £0.6 million (2015 £0.6 million).

4. Intangible assets

	Goodwill £ million
Cost	
At 1 January 2016 and 31 December 2016	6.8
Accumulated amortisation and impairment losses	
At 1 January 2016 and 31 December 2016	4.4
Net book value at 31 December 2015	2.4
Net book value at 31 December 2016	**2.4**

The carrying value of goodwill has been tested by reference to the value in use of the Positioning CGU. No impairment of goodwill was required.

5. Tangible fixed assets

£ million

	Freehold land and buildings	Plant and machinery	Fixtures, fittings and equipment	Total
Cost				
At 1 January 2016	0.7	3.0	1.0	4.7
Additions	–	0.5	0.4	0.9
Disposals	–	(0.1)	–	(0.1)
Transfers	–	0.3	0.5	0.8
At 31 December 2016	0.7	3.7	1.9	6.3
Accumulated depreciation and impairment				
At 1 January 2016	0.2	2.6	0.8	3.6
Provided during the year	0.1	0.3	0.1	0.5
Disposals	–	(0.1)	–	(0.1)
Transfers	–	0.2	0.5	0.7
At 31 December 2016	0.3	3.0	1.4	4.7
Net book value at 31 December 2015	0.5	0.4	0.2	1.1
Net book value at 31 December 2016	**0.4**	**0.7**	**0.5**	**1.6**

6. Investments

	Shares in subsidiaries £ million	Loans to subsidiaries £ million	Total £ million
Cost			
At 1 January 2016	**1,068.8**	**8.1**	**1,076.9**
Additions	**11.7**	**3.1**	**14.8**
Repayments	**–**	**(6.3)**	**(6.3)**
Share-based payment	**0.5**	**–**	**0.5**
At 31 December 2016	**1,081.0**	**4.9**	**1,085.9**
Amounts provided			
At 1 January 2016	**728.3**	**1.4**	**729.7**
Amounts provided in the year	**15.4**	**2.1**	**17.5**
At 31 December 2016	**743.7**	**3.5**	**747.2**
Net book value at 31 December 2015	340.5	6.7	347.2
Net book value at 31 December 2016	**337.3**	**1.4**	**338.7**

The recoverability of the carrying value of investments in subsidiaries has been assessed by reference to value in use, except where noted below.

A provision of £7.6 million (2015 £7.3 million) was recorded against the subsidiary that holds the investment in the Device Intelligence line of business and a provision of £1.7 million (2015 nil) against Epitiro Group Limited, both based on the estimate of future cash flows. The recoverability of the carrying value of these investments was assessed by reference to fair value less costs of disposal. At 31 December 2016, the recoverable amounts of these investments were nil. See note 14 of Notes to the consolidated financial statements for further detail.

On 1 April 2016 the entire business of Spirent Communications (International) Limited was transferred to the Company, with consideration for the transfer represented by the net book value of all assets and liabilities at the date of transfer. Following this, the recoverability of the investment in Spirent Communications (International) Limited was assessed by reference to value in use. A provision of £8.2 million (2015 nil) has been recorded against the carrying value of the Company's investment in Spirent Communications (International) Limited as a result, based on the estimate of future cash flows. At 31 December 2016, the recoverable amount of the investment in Spirent Communications (International) Limited is nil. See note 14 of Notes to the consolidated financial statements for further detail.

7. Stocks

	2016 £ million	2015 £ million
Work in progress	**0.2**	0.6
Finished goods	**1.2**	1.2
	1.4	1.8

There were no stock write-downs recognised in the period (2015 nil) and there were no reversals of prior period stock write-downs (2015 nil).

No stock is carried at fair value less costs to sell (2015 nil).

8. Debtors

	2016 £ million	2015 £ million
Due within one year		
Trade debtors	**7.5**	1.9
Owed by subsidiaries	**8.7**	4.2
Other debtors	**0.8**	1.0
Prepayments and accrued income	**2.2**	0.7
Deferred tax (note 10)	**2.9**	3.9
	22.1	11.7

The directors consider that the carrying amount of trade and other debtors approximates their fair value.

The Company has no significant concentration of credit risk attributable to its trade debtors as the exposure is spread over a large number of customers.

9. Trade and other creditors: amounts falling due within one year

	2016 £ million	2015 £ million
Trade creditors	**2.2**	0.8
Owed to subsidiaries	**78.8**	73.9
Accruals and deferred income	**10.4**	7.8
Other taxes and social security costs	**0.6**	0.5
	92.0	83.0

Trade creditors are non-interest bearing and are normally settled on 30 to 60 day terms. Other creditors are non-interest bearing.

The directors consider that the carrying amount of trade creditors approximates their fair value.

10. Deferred tax

The movements in the deferred tax assets are as follows:

	Temporary differences	Tax losses	UK pension plans	Total (£ million)
At 1 January 2015	0.2	0.6	1.9	2.7
Credited in the year	–	0.4	–	0.4
Deferred tax on defined benefit pension plan	–	–	0.8	0.8
At 1 January 2016	**0.2**	**1.0**	**2.7**	**3.9**
Charged in the year	**–**	**(0.8)**	**–**	**(0.8)**
Deferred tax on defined benefit pension plan	**–**	**–**	**(0.6)**	**(0.6)**
Transferred in the year	**–**	**0.4**	**–**	**0.4**
At 31 December 2016	**0.2**	**0.6**	**2.1**	**2.9**

The Company has tax losses of £23.6 million (2015 £23.6 million) that are available for offset against suitable future taxable profits.

A deferred tax asset has not been recognised in respect of these losses as their future recovery is uncertain. These losses can be carried forward indefinitely.

The Company also has capital losses carried forward of £823.3 million (2015 £823.3 million) for which no deferred tax asset has been recognised on the balance sheet. These capital losses have no expiry date.

£1.4 million (2015 £1.9 million) of the deferred tax asset is due after one year.

11. Operating lease commitments

At the balance sheet date, the Company had outstanding commitments for future minimum lease payments under non-cancellable operating leases, which fall due as follows:

	2016 £ million	2015 £ million
Within one year	**0.1**	0.1
In the second to fifth years	**–**	0.1
	0.1	0.2

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12. Dividends

	2016 £ million	2015 £ million
Declared and paid in the year		
Equity dividend on Ordinary Shares		
Final dividend paid for the year ended 31 December 2015 of 1.59 pence per Ordinary Share (31 December 2014 1.43 pence)	**9.7**	8.7
Interim dividend 2016 of 1.27 pence per Ordinary Share (2015 1.08 pence)	**7.8**	6.6
	17.5	15.3
Proposed for approval at AGM (not recognised as a liability at 31 December)		
Equity dividend on Ordinary Shares		
Final dividend 2016 of 1.80 pence per Ordinary Share (2015 1.59 pence)	**11.0**	9.7

The directors are proposing a final dividend in respect of the financial year ended 31 December 2016 of 1.80 pence per Ordinary Share (2015 1.59 pence), which will absorb an estimated £11.0 million of shareholders' funds (2015 £9.7 million). It will be paid on 5 May 2017 to Ordinary shareholders who are on the Register of Members at close of business on 10 March 2017. Payment will be made to ADR holders on 15 May 2017. No liability is recorded in the financial statements in respect of this final dividend.

Dividends are determined in US dollars and paid in pounds sterling. The exchange rate for determining the amount of the final dividend to be paid for 2016 was $1.23:£1 (2015 $1.39:£1).

13. Capital and reserves

Changes during the year in the issued Ordinary Share capital were as follows:

	Number of Ordinary shares million
Issued and fully paid Ordinary Shares of 3 1/3 pence each at 1 January 2016 and 31 December 2016	**611.7**

In 2016 no Ordinary Shares were transferred from the Spirent Employee Share Ownership Trust ("ESOT") to satisfy options exercised under the 2005 Employee Incentive Plan (2015 0.1 million Ordinary Shares).

There has been no material increase in the issued Ordinary Share capital, whether by exercise of share incentives or otherwise, between 31 December 2016 and 2 March 2017, the date on which these financial statements have been signed.

Please refer to note 29 of the Notes to the consolidated financial statements on page 131 for disclosures relating to the nature and purpose of each reserve within equity.

Investment in own Ordinary Shares

At 31 December 2016, the ESOT held 0.6 million Ordinary Shares (2015 0.6 million Ordinary Shares) to satisfy awards under various share incentive plans. At 31 December 2016, the Spirent Sharesave Trust held 0.5 million Ordinary Shares (2015 0.5 million Ordinary Shares) to satisfy awards made to United Kingdom based employees under an all employee share scheme. The market value of own Ordinary Shares held in trust, being in total 1.1 million Ordinary Shares (2015 1.1 million Ordinary Shares), at 31 December 2016 was £1.0 million (2015 £0.8 million).

Capital redemption reserve

During 2016 the Company did not cancel any Ordinary Shares (2015 nil) and did not make any transfers to the capital redemption reserve (2015 nil).

Employee share plans

The Company operates a number of employee share incentive plans which are described in note 30 of Notes to the consolidated financial statements. The following share incentives over Ordinary Shares under these plans have been granted and remain outstanding, held by employees of the parent Company.

13. Capital and reserves continued

Movements in share incentives during the year to 31 December 2016 are shown below:

	2005 Employee Incentive Plan		Spirent Long-term Incentive Plan	
	Number of share incentives million	Weighted average exercise price pence	Number of share incentives million	Weighted average exercise price pence
Incentives outstanding at 31 December 2014	1.8	23	–	–
Granted	1.0	8	–	–
Exercised	(0.1)	52	–	–
Expired	(0.3)	–	–	–
Cancelled	(0.1)	111	–	–
Incentives outstanding at 31 December 2015	**2.3**	**14**	**–**	**–**
Granted	**–**	**–**	**1.5**	**–**
Transferred in	**0.2**	**50**	**–**	**–**
Exercised	**(0.1)**	**48**	**–**	**–**
Expired	**(0.3)**	**–**	**–**	**–**
Cancelled	**(0.7)**	**30**	**–**	**–**
Incentives outstanding at 31 December 2016	**1.4**	**13**	**1.5**	**–**
Incentives exercisable at 31 December 2015	0.1	48	–	–
Incentives exercisable at 31 December 2016	**–**	**–**	**–**	**–**

The weighted average share price at exercise date was 83.0 pence (2015 78.6 pence).

The following information relates to outstanding share incentives at 31 December 2016:

					2016			2015
Share plan	Exercise period (as at 31 December)	Range of exercise prices pence	Weighted average exercise price pence	Number of share incentives outstanding million	Weighted average remaining contractual life years	Weighted average exercise price pence	Number of share incentives outstanding million	Weighted average remaining contractual life years
2005 Employee Incentive Plan[1]	**27.04.14-17.05.25**	**0-89**	**3**	**1.4**	**7.9**	6.6	2.2	8.4
	21.03.15-21.03.25	**–**	**–**	**–**	**–**	131.7	0.1	7.2
Spirent Long-term Incentive Plan[2]	**16.06.16-29.09.19**	**–**	**–**	**1.5**	**9.6**	–	–	–
				2.9			2.3	

Notes

1 Figures for the 2005 Employee Incentive Plan include share options, stock appreciation rights and Performance Shares in aggregate. No exercise price is payable on the vesting of a Performance Share.

2 Figures for the Spirent Long-term Incentive Plan include share options, stock appreciation rights and Performance Shares in aggregate. No exercise price is payable on the vesting of a Performance Share.

14. Share-based payment

The total charge for the year relating to employee share-based payment plans is as follows:

	2016 £ million	2015 £ million
2005 Employee Incentive Plan	–	0.1
Spirent Long-term Incentive Plan	0.1	–
	0.1	0.1

All schemes are equity-settled.

The fair value of share incentives has been estimated as at the date of grant using the Hull-White trinomial model.

The following table gives the assumptions made in arriving at the share-based payment charge and the fair value:

	2016	2015
Weighted average share price (pence)	78.9	86.8
Weighted average exercise price (pence)	–	7.5
Weighted average fair value (pence)	51.8	54.2
Expected volatility (%)	39-40	41.0
Option life (years)		
Performance Shares	3.0	3.0
Options and SARs	10.0	10.0
Suboptimal exercise factor	1.5	1.5
Risk free rate (%)	0.8-1.2	1.6-2.1
Dividend yield (%)	3.2	2.6

The expected volatility was determined by calculating the historical volatility of the Company's share price over the previous two years which management considers to be the period which is likely to be most representative of future volatility. The risk free rate is calculated by reference to UK government bonds.

15. Subsidiaries

A list of subsidiaries, including the name, country of incorporation, registered office address and proportion of ownership interest is given on pages 151 and 152 of this Annual Report.

16. Capital commitments and contingent liabilities

There were no capital commitments at 31 December 2016 or 31 December 2015.

Spirent Communications plc has provided indemnities of nil (2015 £0.1 million) for certain ongoing business obligations under letters of credit for subsidiary companies.

17. Employees

The average number of people employed by the Company during the year was:

	2016 Number	2015 Number
Manufacturing	32	25
Product development	43	34
Selling and distribution	41	16
Administration	22	11
	138	86

Employee benefit costs were:

	Note	2016 £ million	2015 £ million
Remuneration		10.1	6.2
Social security costs		1.1	0.7
Pension and other related costs		1.6	1.3
Expense of share-based payment	14	0.1	0.1
		12.9	8.3

A full list of subsidiaries and companies in which Spirent Communications plc has an interest of more than 20% at 31 December 2016. The country of incorporation and the effective percentage of equity owned (if less than 100%) is also detailed below. Unless otherwise noted, the share capital comprises ordinary shares which are indirectly held by Spirent Communications plc.

Company Name	Registered in	Registered office address	Notes
Spirent Communications of Ottawa Limited	Canada	100 King Street West, 41st Floor, 1 First Canadian Place, Toronto, Ontario, M5X 1B2	
Spirent Communications Technology (Beijing) Limited	China	Suite 1302, Shining Tower, No 35 Xue Yuan Road, Haidian District, Beijing 100191	Held directly
Mobilethink A/S	Denmark	Ny Banegårdsgade 55, 8000 Aarhus C	
Spirent Holdings Denmark ApS	Denmark	Havnegade 39, 1058 Copenhagen K	
Tweakker ApS	Denmark	Ny Banegårdsgade 55, 8000 Aarhus C	
Tweakker Holding ApS	Denmark	Ny Banegårdsgade 55, 8000 Aarhus C	
Bowthorpe Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	Held directly
Cambridge Analytical Group Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	Held directly
Earlynow Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	Held directly
Epitiro Group Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	Held directly
Metrico Wireless Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	Held directly
PG International Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	Held directly
Shipbrick Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	54.55% held directly, 45.45% held indirectly
Spirent Capital Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	Held directly
Spirent Communications (International) Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	Held directly
Spirent Communications (Scotland) Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	Held directly
Spirent Communications (SW) Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	Held directly
Spirent Financial Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	Held directly
Spirent Financing Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	
Spirent Holdings Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	Held directly
Spirent Investment Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	Held directly
Spirent Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	Held directly

Company Name	Registered in	Registered office address	Notes
Spirent Sharesave Trust Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	Held directly
Spirent Systems Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	100% 'A' shares held indirectly, 100% 'B' shares held directly
Spirent Systems No 2 Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	
TFDC Limited	England	Northwood Park, Gatwick Road, Crawley, West Sussex RH10 9XN	
Spirent Communications SAS	France	Business Park Val St Quentin, 2 rue Rene Caudron, Voisins le Bretonneux 78960	Held directly
Spirent Communications GmbH	Germany	Leopoldstrasse 252a, 80807 Munich	
Spirent Technologies GmbH	Germany	Michaelkirchstr 17/18, 10179 Berlin	
Spirent (Overseas) Limited	Guernsey	Suite 6, Provident House, Havilland Street, St Peter Port GY1 2QE	
Spirent Communications (Asia) Limited	Hong Kong	Suites 1905-07, 19th Floor, Olympia Plaza, 243-255 King's Road, North Point	
Spirent Communications (India) Pvt Limited	India	9th Flr Umiya Business Bay Tower, 1 Cessna Business Park, Marathahalli-Sarjapur Ring Road, Kadubeesanahalli, Bangalore 560037 Karnataka	
Spirent Communications Israel Limited	Israel	24 Raul Wallenburg Street, Building D, Tel Aviv 6971920	
Spirent Communications Japan KK	Japan	4th Floor Kyodotsushin Kaikan, 2-2-5, Toranomon, Minato-ku, Tokyo 105-0001	
Spirent Communications Singapore Pte Limited	Singapore	101 Thomson Road, #30-01 United Square, Singapore 307591	
Spirent Communciations Korea Inc	South Korea	2F, 16 Gangnam-daero 95-gil, Seocho-gu, Seoul 06526	
Spirent Communications Taiwan Limited	Taiwan	8F-1, No 10, Ln 360, Sec 1 Neihu Road, Neihu District, Taipei City 11493	
Jolata, Inc	US (Delaware)	3500 South Dupont Highway, Dover, Delaware 19901	26% held indirectly*
Netcom Systems Holding Corporation	US (Delaware)	1209 Orange Street, Wilmington, Delaware 19801	
Spirent Communications Inc	US (Delaware)	1209 Orange Street, Wilmington, Delaware 19801	
Spirent Federal Systems Inc	US (Delaware)	1209 Orange Street, Wilmington, Delaware 19801	
Spirent Holdings Corporation	US (Delaware)	1209 Orange Street, Wilmington, Delaware 19801	
Spirent Communications Hawaii LLC	US (Hawaii)	1209 Orange Street, Wilmington, Delaware 19801	

Note
* Spirent Communications plc holds 26% of the issued share capital in Jolata, Inc through one of its subsidiaries; this has been treated as an associate company in these financial statements.

FINANCIAL HISTORY

					$ million
	2016	2015	2014	2013	2012
Summary income statement					
Continuing operations					
Revenue	**457.9**	477.1	457.2	413.5	472.4
Cost of sales	**(133.6)**	(145.3)	(140.9)	(126.7)	(135.7)
Gross profit	**324.3**	331.8	316.3	286.8	336.7
Product development	**(111.7)**	(118.3)	(115.4)	(100.5)	(86.1)
Selling and distribution	**(125.4)**	(127.2)	(113.5)	(96.6)	(91.7)
Administration	**(40.7)**	(44.2)	(41.4)	(39.6)	(40.6)
Other items	**(87.6)**	(32.0)	(22.3)	(11.0)	(10.2)
Operating (loss)/profit	**(41.1)**	10.1	23.7	39.1	108.1
Share of loss of associate	**(4.5)**	(0.4)	–	–	–
Net finance (costs)/income	**(0.4)**	(0.1)	0.4	–	0.3
(Loss)/profit before tax	**(46.0)**	9.6	24.1	39.1	108.4
Tax	**3.7**	3.9	(3.5)	(6.4)	(29.0)
(Loss)/profit from continuing operations after tax	**(42.3)**	13.5	20.6	32.7	79.4
Discontinued operations	**–**	–	–	–	47.1
(Loss)/profit for the year	**(42.3)**	13.5	20.6	32.7	126.5
Summary balance sheet					
Intangible assets	**169.8**	251.6	273.3	198.8	207.4
Property, plant and equipment	**47.3**	51.1	52.2	39.6	34.1
Working capital (excluding cash and deferred tax)	**15.6**	8.8	13.9	(10.8)	7.3
Operating assets	**232.7**	311.5	339.4	227.6	248.8
Investment in associate	**–**	4.6	–	–	–
Net funds including long-term cash	**96.2**	102.1	99.8	216.3	249.0
Provisions and other liabilities	**(6.8)**	(11.3)	(8.3)	(6.5)	(5.0)
Deferred tax	**33.0**	25.0	18.0	18.3	28.4
Defined benefit pension plan deficit	**(13.5)**	(19.8)	(14.5)	(3.3)	(25.6)
Net assets	**341.6**	412.1	434.4	452.4	495.6
Total equity	**341.6**	412.1	434.4	452.4	495.6
Summary cash flows					
Cash flow from operating activities	**42.7**	60.4	41.7	67.4	105.1
Net interest received	**0.3**	0.4	0.6	0.8	0.6
Net capital expenditure	**(17.1)**	(25.5)	(31.6)	(24.3)	(14.3)
Free cash flow	**25.9**	35.3	10.7	43.9	91.4
Acquisitions and disposals and investment in associate	**(2.7)**	(6.7)	(85.9)	–	(32.1)
Share capital and share repurchase	**–**	0.1	(16.4)	(54.5)	(29.4)
Dividends paid	**(24.2)**	(23.5)	(22.2)	(22.2)	(20.3)
Transfer from long-term deposit and loan repayment	**–**	(0.1)	–	0.3	0.3
Net (decrease)/increase in cash and cash equivalents	**(1.0)**	5.1	(113.8)	(32.5)	9.9

					$ million
	2016	2015	2014	2013	2012
Other information – continuing operations					
Expenditure on property, plant and equipment	**17.3**	26.5	33.8	22.9	15.9
Depreciation	**19.1**	25.0	19.7	16.5	14.6
Product development	**111.7**	118.3	115.4	100.5	86.1
Share information					
(Loss)/earnings per share from continuing operations (cents)					
Basic	**(6.93)**	2.18	3.35	5.10	12.11
Diluted	**(6.93)**	2.17	3.35	5.09	12.07
Adjusted basic[1,2]	**5.29**	5.00	5.82	5.71	13.02
Total dividend per Ordinary Share (cents)	**3.89**	3.89	3.89	3.54	3.22
Fully paid Ordinary Shares in issue at year end (number million)	**611.7**	611.7	611.7	621.4	650.6
Segmental analysis – continuing operations					
Revenue					
Networks & Applications	**259.4**	244.0	223.8	213.4	259.5
Wireless & Positioning	**118.5**	137.2	150.1	141.9	168.1
Service Assurance	**80.0**	95.9	83.3	58.2	44.8
	457.9	477.1	457.2	413.5	472.4
Operating profit					
Networks & Applications	**25.2**	18.9	8.1	13.2	59.7
Wireless & Positioning	**17.1**	14.9	23.2	28.9	56.2
Service Assurance	**11.7**	14.1	21.0	13.9	8.9
Corporate – non-segmental	**(7.5)**	(5.8)	(6.3)	(5.9)	(6.5)
Operating profit[1]	**46.5**	42.1	46.0	50.1	118.3
Exceptional items	**(4.8)**	(12.5)	(4.1)	(3.8)	(2.9)
Acquisition related costs	**–**	(0.1)	(3.8)	–	(1.2)
Acquired intangible asset amortisation and impairment	**(20.6)**	(14.8)	(13.7)	(8.4)	(4.5)
Goodwill impairment	**(61.4)**	(3.8)	–	–	–
Share-based payment	**(0.8)**	(0.8)	(0.7)	1.2	(1.6)
	(41.1)	10.1	23.7	39.1	108.1
Geographical information – continuing operations					
Revenue by market					
Americas	**254.1**	268.1	245.0	228.2	252.0
Asia Pacific	**149.3**	148.2	142.5	132.2	150.8
Europe, Middle East and Africa	**54.5**	60.8	69.7	53.1	69.6
	457.9	477.1	457.2	413.5	472.4

Notes
1 Before exceptional items, acquisition related costs, acquired intangible asset amortisation and impairment, goodwill impairment and share-based payment.
2 Before impairment of investment in associate items in note 1, tax effect of items in note 1 and prior year tax.

Financial calendar 2017

2 March	Preliminary results and final dividend announcement
9 March	Final dividend – ex-dividend date
10 March	Final dividend – record date
3 May	Annual General Meeting
5 May	Final dividend – payment date (Ordinary shareholders)
15 May	Final dividend – payment date (ADR holders)
30 June	Half-year end
August	Half-year results and interim dividend announcement
August	Interim dividend – ex-dividend date
August	Interim dividend – record date
September	Interim dividend – payment date (Ordinary shareholders)
September	Interim dividend – payment date (ADR holders)
31 December 2017	Financial year end
February/March 2018	2017 Preliminary results and final dividend announcement

Ordinary Shares and American Depositary Receipts

The Company's Ordinary Shares are traded on the London Stock Exchange (ticker: SPT). The Company operates a Level 1 American Depositary Receipt ("ADR") programme with each ADR representing four Ordinary Shares. The ADRs trade on the US over-the-counter market (symbol: SPMYY; CUSIP: 84856M209). BNY Mellon is the authorised depositary bank for the Company's ADR programme. The ADRs are quoted on the OTC Pink electronic quotation service which can be found at www.otcmarkets.com/otc-pink/home.

Annual General Meeting

The Company's 2017 Annual General Meeting ("2017 AGM") will be held at 10.30am on 3 May 2017 at the offices of Spirent Communications at Aspen Way, Paignton, Devon TQ4 7QR.

Company's registrar

Enquiries concerning shareholdings, change of address or other particulars should be directed in the first instance to the Company's registrar, Equiniti, on 0371 384 2126. Equiniti also provide a range of online shareholder information services at www.shareview.co.uk, where shareholders can check their holdings and find practical help on transferring shares or updating their details.

Dividends

Shareholders are able to choose to receive their dividends direct to their bank account, reinvested in Ordinary Shares through the Company's Dividend Reinvestment Plan (see below), paid by cheque or paid in foreign currencies. To change how you receive your dividends please contact the Company's registrar, Equiniti, on 0371 384 2268 or log on to www.shareview.co.uk.

Dividend reinvestment plan

The Company has a Dividend Reinvestment Plan ("DRIP") delivered by Equiniti Financial Services Limited. The DRIP allows eligible shareholders to use their cash dividend to buy additional shares in the Company, so increasing their shareholding. If you would like additional information, please contact the Company's registrar, Equiniti, on 0371 384 2268 or log on to www.shareview.co.uk.

Shareholder security

Shareholders are advised to be wary of any unsolicited advice, offers to buy shares at a discount or offers of free reports about the Company.

Details of any share dealing facilities that the Company endorses will be included in the Company's mailings or on our website. More detailed information can be found at www.fsa.gov.uk/consumerinformation.

3G (Third Generation)	Third generation of mobile communications that delivers data rates of hundreds of kilobits per second to tens of megabits per second.
4G (Fourth Generation)	Fourth generation of mobile communications that delivers data rates of tens to hundreds of megabits per second. Future 4G technologies promise data rates in excess of one gigabit per second.
5G (Fifth Generation)	The next major phase of mobile telecommunications standards beyond the current 4G/IMT-Advanced standards.
Big Data Analytics	Large amounts of structured or unstructured data that has the potential to be mined for intelligence.
Cloud	A variety of computing concepts that involve a large number of computers connected through a real-time communication network such as the internet. Often used in reference to network-based services served up by virtual hardware, simulated by software running on one or more physical machines.
Connected Vehicles	An internet-connected vehicle that provides additional benefits to the user including automatic notification of accidents and safety alerts as well as navigation and internet-based applications.
Cyber Security	Protects networks, computers, applications and data from attack, damage or unauthorised access.
Data Center	A centralised location where computing resources critical to an organisation are maintained in a highly controlled environment.
DevOps	A term used to refer to a set of practices that emphasise the collaboration and communication of both software developers and information technology professionals while automating the process of software delivery and infrastructure changes. It aims at establishing a culture and environment where building, testing, and releasing software can happen rapidly, frequently and more reliably.
Enhanced Voice Services (EVS)	A superwideband speech audio coding standard. It offers up to 20 kHz audio bandwidth and is claimed to have high robustness to delay jitter and packet losses. It has been developed in 3GPP and is described in 3GPP TS 26.441. The application areas of EVS consist of improved telephony and teleconferencing, audiovisual conferencing services and streaming audio.
Ethernet	A family of networking technologies originally developed for local area networks, which migrated to metro area networks and eventually became the dominant standard in wireline networks worldwide.
EV-DO: Evolution-Data Optimised (EV-DO or EVDO)	A telecommunications standard for the wireless transmission of data through radio signals, typically for broadband Internet access. EV-DO is an evolution of the CDMA2000 (IS-2000) standard that supports high data rates and can be deployed alongside a wireless carrier's voice services.
Frequency division duplex (FDD)	A technique where separate frequency bands are used at the transmitter and receiver side.
Global Navigation Satellite Systems (GNSS)	The standard generic term for satellite navigation systems that provide autonomous geo-spatial positioning with global coverage. GNSS allows users' receivers to determine their location to within a few metres by employing a triangulation technique that uses information from multiple satellites.
Global Positioning System (GPS)	A global navigation satellite system operated by the United States government for determining a user's location and height at any point on the earth's surface. A receiver uses minute differences in measured time signals from clocks on satellites to calculate these positions and altitudes.
High-Speed Packet Access (HSPA)	An amalgamation of two mobile protocols, HSDPA and High-Speed Uplink Packet Access (HSUPA), that extends and improves the performance of existing 3G mobile telecommunication networks using the WCDMA protocols.
IHS Markit (IHS)	IHS Markit provides information and analysis to support the decision-making process of businesses and governments in industries such as aerospace, defense and security; automotive; chemical; energy; maritime and trade; and technology.

Internet of Things (IoT)	A network of physical objects or "things" embedded with electronics, software, sensors and connectivity to enable data exchange with the manufacturer, operator and/or other connected devices. Each thing is uniquely identifiable through its embedded computing system but is able to interoperate within existing internet infrastructure.
Internet Protocol (IP)	The primary network protocol used on the internet and on other network devices to facilitate and control the flow of data.
Internet Protocol Multimedia Subsystem (IMS)	A standardised next-generation architecture for telecoms operators who want to provide mobile and fixed multimedia services.
Long-Term Evolution (LTE)	An advanced wireless data communications technology standard (sometimes called "4G") which is an evolution of 3G UMTS standards. In addition to a new wireless interface specification, LTE uses a simplified flat IP-based network architecture.
Network Functions Virtualisation (NFV)	An initiative to provide a new network production environment which lowers cost, raises efficiency and increases agility by hosting network functions previously carried out by proprietary, dedicated hardware on virtual machines running on industry-standard commodity hardware.
Observed Time Difference Of Arrival (OTDOA)	A positioning feature introduced in release 9 of the E-UTRA (LTE radio).
Rich Communication Suite (RCS)	Also known as Rich Communication Services, RCS is a platform intended to enable mobile network operators to deliver integrated communication services, beyond voice and SMS, over all-IP networks, including instant messaging or chat, live video and file sharing, across any device on any network.
Software-as-a-Service (SaaS)	A way of delivering applications over the internet as a service instead of installing and maintaining software.
Software-Defined Network (SDN)	An approach to networking in which control is decoupled from hardware and given to a software application called a controller.
Time division duplex (TDD)	TDD refers to duplex communication links where uplink is separated from downlink by the allocation of different time slots in the same frequency band.
Virtualisation	Technologies designed to provide a layer of abstraction from the physical characteristics of computing resources to simplify the way in which other systems, applications or end users interact with those resources.
Voice over LTE (VoLTE)	A standards-based scheme adopted by the GSMA, the cellular industry's association, to provide voice service over data-only LTE networks. VoLTE's use of an IP Media Subsystem enables voice to be offered as part of a rich communications solution, integrated with services such as messaging, live video sharing and file transfer.
Voice over Wi-Fi (VoWi-Fi)	Transmission of IP-based voice communication ("VoIP") over a Wi-Fi network.
Zigbee	ZigBee is an IEEE 802.15.4-based specification for a suite of high level communication protocols used to create personal area networks with small, low power digital radios, such as for home automation, medical device data collection and other low-power low-bandwidth needs, designed for small scale projects which need wireless connection.

CONTACT DETAILS

Registered office
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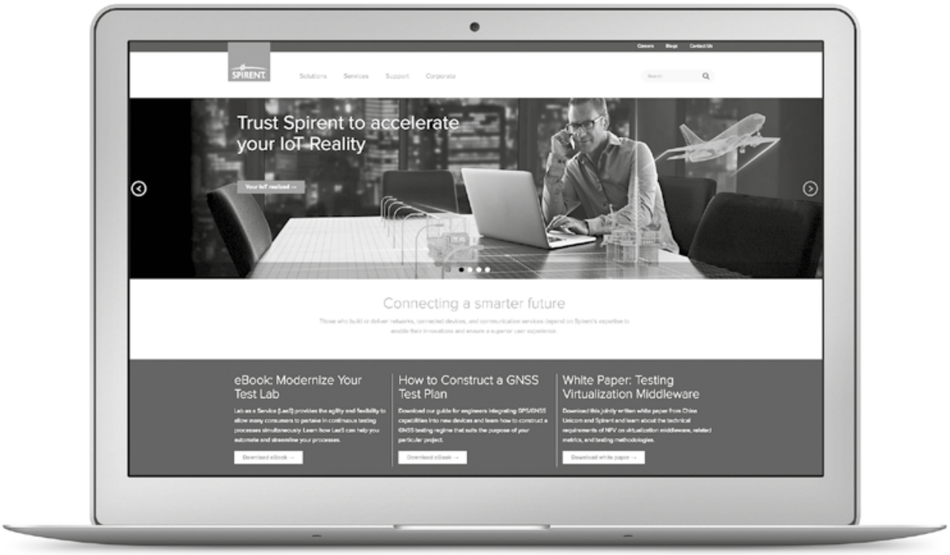

Go online to find out more

Our corporate website has key information covering our capabilities, markets, corporate responsibility and investor relations.

https://corporate.spirent.com

Join the conversation

Engage with us and keep up with the latest news and developments via social media.

NOTES

Consultancy, design and production
www.luminous.co.uk

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