SPIRENT COMMUNICATIONS PLC
FULL YEAR RESULTS FOR THE YEAR ENDED 31 DECEMBER 2016

London, UK – 2 March 2017: Spirent Communications plc ("Spirent", the "Company" or the "Group") (LSE: SPT), a leading communications technology company, today announces its full year results for the financial year ended 31 December 2016.

Results summary

$ million	**2016**	2015
Revenue	**457.9**	477.1
Book to bill[1] (ratio)	**103**	101
Adjusted operating profit[2]	**46.5**	42.1
Adjusted profit before tax[3]	**44.2**	41.6
Adjusted basic earnings per share[4] (cents)	**5.29**	5.00
Operating margin[5] (%)	**10.2**	8.8
Reported operating (loss)/profit	**(41.1)**	10.1
Reported (loss)/profit before tax	**(46.0)**	9.6
Total dividend per share[6] (cents)	**3.89**	3.89
Free cash flow[7]	**25.9**	35.3
Closing cash	**96.1**	102.0

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 (GNSS) 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.

Business review

- Business review undertaken to accelerate progress on strategy.
- Sought to identify areas most likely to deliver combination of long-term operational success and optimal earnings growth potential.
- From a wide portfolio of technical offerings, we have decided to narrow our focus on key growth areas and combine business units which result in synergies for both technical and customer offerings, allowing a more streamlined management structure. Reorganisation around three focused segments driven by market trends: Networks & Security, Lifecycle Service Assurance and Connected Devices.
- Goodwill and acquired intangible asset impairment of $69.1 million taken in the year, reflecting the impact of narrowing of focus and new segmentation, relating to the Wireless, Device Intelligence and Developer Tools lines of business.

Outlook

Strategic contract wins in our core business in 2016 for high-speed Ethernet test systems, virtualisation, cloud, and active test in operational networks for major service providers, combined with competitive wins with new security test solutions, give the Board confidence to expect growth in 2017.

Eric Hutchinson, Chief Executive Officer, commented:

"We are focusing the business on the large sustainable growth vectors that matter most to our customers. These are driven by the exponential growth in data, the virtualisation of networks and assurance against cyber security threats. Our competitive wins and market share gains demonstrate that we are on track and are well positioned for future growth."

- ends -

Notes

1 The ratio of orders booked to revenue in the period.

2 Adjusted operating profit is before charging 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).

3 Before items set out in note 2 and impairment of investment in associate

4 Adjusted basic earnings per share is based on adjusted earnings as set out in note 10 of Notes to the full year consolidated financial statements.

5 Operating profit before exceptional items as a percentage of revenue in the period.

6 Dividends are determined in US dollars and paid in sterling at the exchange rate prevailing when the dividend is proposed. The final dividend proposed for 2016 of 2.21 cents per Ordinary Share is equivalent to 1.80 pence per Ordinary Share.

7 Operating cash flow after tax, net interest and net capital expenditure.

Enquiries

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The Company will host a results presentation today at 9.15am for 9.30am UK time at UBS Limited, 5 Broadgate, London, EC2M 2QS. A simultaneous webcast of the presentation will be available in the Investors section of the Spirent Communications plc website http://corporate.spirent.com/.

CHIEF EXECUTIVE OFFICER'S REVIEW

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 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	2017
Networks & Applications Cloud/IP. Application Security. Mobile Infrastructure. Automation	**Networks & Security** Cloud/IP. Application Security. Positioning
Wireless & Positioning Wireless. Developer Tools. Positioning	**Lifecycle Service Assurance** Mobile Infrastructure. Customer Experience Management. Service Assurance. Automation
Service Assurance Service Assurance. Service Experience. Customer Experience Management. Device Intelligence	**Connected Devices** Wireless. Service Experience. Device Intelligence. Developer Tools

$ 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

$ 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 3 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 network functions virtualisation (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 Internet of Things.*

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.

FINANCIAL REVIEW

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 amounting to $87.6 million in total (2015: $32.0 million).
2 Operating profit before exceptional items as a percentage of revenue in the period.
3 Adjusted basic earnings per share is based on adjusted earnings as set out in note 10 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 3 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 operated 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 3 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).

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-$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 purposes. In addition, the change on 1 January 2017 to the reporting 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 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 results of associated companies
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 26-27 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 10 to Notes to the full year consolidated financial statements on page 30 for the calculation of earnings per share.

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 demo 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 will take 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 Review for an explanation of how the lines of business have been remapped from the current to the new operating segments.

Documents showing restated historical comparative information under the current and intended operating segment formats are available to view and download at http://corporate.spirent.com/.

OPERATIONAL REVIEW

Networks & Applications – 57% of Group revenue

Networks & Applications develops performance and security testing 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/IP for data centres and networks, cloud, virtualisation, applications, security and mobile networks.

$ million	2016	2015[1]	Change (%)
Revenue	**259.4**	244.0	6
Operating profit[2]	**25.2**	18.9	33
Operating margin[2]	**9.7**	7.7	

Note
1 Restated for changes to the Group's operating segments effective 1 January 2016 as set out in note 3 of Notes to the full year consolidated financial statements.
2 Before exceptional items.

Performance highlights

- Revenue up 6 per cent to $259.4 million with improved operating margin before exceptional items
- Strong demand for 100G 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).

Progress

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 in conjunction with Huawei of 400G Ethernet implementations. In addition, we launched a 100G test solution supporting the latest generation of optical transceivers, helping to drive further 100G adoption with a small form factor and support of 25G lanes.

Networks & Applications launched a key new product for stress testing cloud functionality in 2016 called Temeva. The first three test applications available in Temeva are:

- Spirent TrafficCenter: a web-based network testing application to test and validate network connectivity, design and traffic flow. TrafficCenter application features include Layer 2 and Layer 3 traffic generation, drag-and-drop traffic flows and mixes, health indicators, enhanced real-time results and comprehensive test reports.
- Spirent MethodologyCenter: a methodology-driven application features standardised test scenarios for NFV infrastructure, Virtual Network Function (VNF) and network benchmarking.

- Spirent CloudStress: an infrastructure benchmarking application designed for performance and capacity planning for Compute, Memory, Storage and Network I/O that features dynamic workloads to validate Cloud and Virtualised infrastructure.

Application 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 is regularly updated to reflect and include the latest real-world threats. It provides 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) capability, enabling carriers to validate VoWi-Fi to VoLTE handovers. With the release of a Diameter performance and scale testing solution for mobile operators, we have also focused on the important issue of predicting and preventing signalling storm outages caused by "always-connected" applications and smartphones that disconnect to save battery life.

A new test product was launched on a high-capacity server (S100-M2) that allows customers such as Nokia (as announced in a press release on 21 June 2016) to test at a very high scale. In the Light Reading evaluation of Nokia's Virtualised Mobile Gateway, it was noted that the Landslide C100-M2 test platform enabled Nokia to generate a real-world mix of consumer and IoT, control, and data-plane traffic to demonstrate its 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, a new small-scale product for active testing in the operational network was released (Landslide EDGE).

Automotive Test

In 2016, Spirent launched the OPEN Alliance Special Interest Group conformance test suite and its AUTOSAR conformance test suite, which complements Spirent TestCenter system and utilises the popular TTCN-3 workbench. This solution automates the full range of relevant test steps within a single tool for automobile manufacturers and their engineering service partners.

Test Automation and Orchestration

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

There were orders from a diverse set of customers from service providers, firewall manufacturers and social networking companies. 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.

Wireless & Positioning – 26% of Group revenue

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.

$ million	**2016**	2015[1]	Change (%)
Revenue	**118.5**	137.2	(14)
Operating profit[2]	**17.1**	14.9	15
Operating margin[2]	**14.4**	10.9	

Note
1 Restated for changes to the Group's operating segments effective 1 January 2016 as set out in note 3 of Notes to the full year consolidated financial statements.
2 Before exceptional items.

Performance highlights

- Operating profit before exceptional items 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)
- Won deal at large US carrier to reduce time and cost to test IoT devices
- Leading video and audio quality testing solution; first to market with high-definition Enhanced Voice Services (EVS)

Progress

Spirent provides innovative solutions for testing connected devices that address challenges around accelerating time-to-market and reducing test time for new services and applications like VoLTE and VoWi-Fi.

Spirent's Wireless business continues to develop leading solutions. In 2016 Spirent's mobile device Location Technology Solution (LTS) became the only solution in the market to have achieved the 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 also introduced its new Channel Emulator (Vertex) at Mobile World Congress in February 2016. This product family addresses the advanced testing needs of 4G and 5G applications and provides higher channel density by using half the space of competitive solutions.

With respect to Positioning, Spirent continues to develop solutions that detect and analyse vulnerabilities in global navigation satellite systems (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, Spirent released a new modular mid-range solution (GSS7000), the smallest and most portable RF Record and Replay system (GSS6450) and a new interference detector (GSS100D), which monitors the RF environment for potential sources of interference to GPS/GNSS systems and automatically detects potentially disruptive events.

Service Assurance – 17% of Group revenue

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

$ million	2016	2015[1]	Change (%)
Revenue	**80.0**	95.9	(17)
Operating profit[2]	**11.7**	14.1	(17)
Operating margin[2]	**14.6**	14.7	

Note
1 Restated for changes to the Group's operating segments effective 1 January 2016 as set out in note 3 of Notes to the full year consolidated financial statements.
2 Before exceptional items.

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

Progress

During 2016, Spirent invested in a broad portfolio of service assurance products and services that target different parts of the service providers' networks and services. These extend to cover the core, backhaul, home, mobility locations and devices from the physical right through to the service layers. This included:

- Delivering and installing 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. Its first sale was fulfilled with the successful deployment into a large network in Latin America.
- There was a major upgrade 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 (HD) Voice Servers in the core networks of tier-1 operators in the US and China which demonstrated its ability to isolate complex VoLTE and Wi-Fi calling issues by performing HD call and speech tests to the server.

About Spirent Communications plc

Spirent Communications plc is a global leader in test and measurement inspiring innovation within development labs, communication networks and IT organisations. We enable today's communication ecosystem as well as tomorrow's emerging enterprises to deploy life enriching communications networks, devices, services and applications. Further information about Spirent Communications plc can be found at http://corporate.spirent.com/ .

Spirent Communications plc 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 Spirent Communications plc Ordinary Shares. The ADRs trade in the US over-the-counter (OTC) market under the symbol SPMYY and the CUSIP number is 84856M209. Spirent ADRs are quoted on the Pink OTC Markets electronic quotation service which can be found at http://www.otcmarkets.com/marketplaces/otc-pink.

Consolidated income statement

$ million	Notes	Year ended 31 December 2016 Adjusted $ million	Year ended 31 December 2016 Adjusting items[1] $ million	Year ended 31 December 2016 Reported $ million	Year ended 31 December 2015 Adjusted $ million	Year ended 31 December 2015 Adjusting items[1] $ million	Year ended 31 December 2015 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	3	**(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)	3	**46.5**	**(87.6)**	**(41.1)**	42.1	(32.0)	10.1
Other items charged in arriving at operating profit/(loss):							
Exceptional items	5	**-**	**(4.8)**	**(4.8)**	-	(12.5)	(12.5)
Acquisition related costs		**-**	**-**	**-**	-	(0.1)	(0.1)
Acquired intangible asset amortisation and impairment	6	**-**	**(20.6)**	**(20.6)**	-	(14.8)	(14.8)
Goodwill impairment	7	**-**	**(61.4)**	**(61.4)**	-	(3.8)	(3.8)
Shared-based payment		**-**	**(0.8)**	**(0.8)**	-	(0.8)	(0.8)
Finance income		**0.3**	**-**	**0.3**	0.4	-	0.4
Finance costs		**(0.7)**	**-**	**(0.7)**	(0.5)	-	(0.5)
Share of loss of associate	8	**(1.9)**	**(2.6)**	**(4.5)**	(0.4)	-	(0.4)
Profit/(loss) before tax	3	**44.2**	**(90.2)**	**(46.0)**	41.6	(32.0)	9.6
Tax	9	**(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 (cents)	10						
Basic		**5.29**		**(6.93)**	5.00		2.18
Diluted		**5.29**		**(6.93)**	4.98		2.17

Note
1 Adjusting items comprise 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.

Consolidated statement of comprehensive income

	Year to 31 December	
$ million	**2016**	2015
(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	**(2.2)**	(9.2)
Income tax effect	**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

Consolidated balance sheet

	At 31 December	
$ million	**2016**	2015
Assets		
Non-current assets		
Intangible assets	**169.8**	251.6
Property, plant and equipment	**47.3**	51.1
Trade and other receivables	**4.6**	4.3
Investment in associate	**-**	4.6
Cash on deposit	**0.1**	0.1
Defined benefit pension plan surplus	**0.9**	1.2
Deferred tax asset	**33.1**	25.6
	255.8	338.5
Current assets		
Inventories	**27.4**	22.9
Trade and other receivables	**128.9**	128.0
Current tax asset	**0.4**	0.6
Cash and cash equivalents	**96.1**	102.0
	252.8	253.5
Total assets	**508.6**	592.0
Liabilities		
Current liabilities		
Trade and other payables	**(127.2)**	(123.4)
Other financial liabilities	**(0.1)**	-
Current tax liability	**(1.5)**	(0.8)
Provisions	**(4.2)**	(8.9)
	(133.0)	(133.1)
Non-current liabilities		
Trade and other payables	**(16.9)**	(20.2)
Other financial liabilities	**-**	(2.6)
Deferred tax liability	**(0.1)**	(0.6)
Defined benefit pension plan deficit	**(14.4)**	(21.0)
Provisions	**(2.6)**	(2.4)
	(34.0)	(46.8)
Total liabilities	**(167.0)**	(179.9)
Net assets	**341.6**	412.1
Capital and reserves		
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

Consolidated cash flow statement

$ million	Notes	Year to 31 December 2016	2015
Cash flows from operating activities			
Cash flow from operations	12	**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		**(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		**-**	(5.0)
Acquisition of subsidiaries and businesses net of cash acquired		**(0.1)**	(1.7)
Net cash used in investing activities		**(16.9)**	(31.9)
Cash flows from financing activities			
Dividend paid		**(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		**96.1**	102.0

Consolidated statement of changes in equity

$ million	Share capital	Share premium account	Capital redemption reserve	Other reserves	Translation reserve	Retained earnings	Total	Non-controlling interest	Total equity
	Attributable to the equity holders of the parent Company								
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	-	-	-	-	(5.9)	(7.4)	(13.3)	-	(13.3)
Total comprehensive income	-	-	-	-	(5.9)	5.9	-	0.2	0.2
Share-based payment	-	-	-	-	-	0.8	0.8	-	0.8
Tax credit on share incentives	-	-	-	-	-	0.1	0.1	-	0.1
Employee Share Ownership Trust	-	-	-	-	-	0.1	0.1	-	0.1
Equity dividends	-	-	-	-	-	(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	**-**	**-**	**-**	**-**	**(2.9)**	**(1.8)**	**(4.7)**	**-**	**(4.7)**
Total comprehensive income	**-**	**-**	**-**	**-**	**(2.9)**	**(44.1)**	**(47.0)**	**-**	**(47.0)**
Share-based payment	**-**	**-**	**-**	**-**	**-**	**0.8**	**0.8**	**-**	**0.8**
Tax charge on share incentives	**-**	**-**	**-**	**-**	**-**	**(0.1)**	**(0.1)**	**-**	**(0.1)**
Acquisition of non-controlling interest	**-**	**-**	**-**	**-**	**-**	**0.3**	**0.3**	**(0.3)**	**-**
Equity dividends	**-**	**-**	**-**	**-**	**-**	**(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 to the full year consolidated financial statements

1 Financial information presented

The financial information contained in this document does not constitute the Group's statutory accounts for the year ended 31 December 2016.

As required by the European Union's IAS Regulation and the Companies Act 2006, the Group has prepared its consolidated financial statements for the year to 31 December 2016 in accordance with International Financial Reporting Standards ("IFRS") as adopted by the European Union and issued by the International Accounting Standards Board. The comparative financial information is based on the statutory accounts to 31 December 2015 which have been delivered to the Registrar of Companies. The report of the auditors on those accounts was unqualified, did not draw attention to any matters by way of emphasis and did not contain a statement made under Section 498 of the Companies Act 2006.

The full year announcement was approved by the Board of Directors on 2 March 2017.

2 Accounting policies

The accounting policies adopted are consistent with those applied in the consolidated financial statements for the year ended 31 December 2015.

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.

Going concern
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.

3 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 is organised into three reportable operating segments; 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 loss 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.

$ million	Networks & Applications	Wireless & Positioning	Service Assurance	Corporate	Total
2016					
Revenue					
External revenue	**259.4**	**118.5**	**80.0**	**-**	**457.9**
Loss before tax					
Total reportable segment profit/(loss) before exceptional items	**25.2**	**17.1**	**11.7**	**(7.5)**	**46.5**
Exceptional items *note 5*	**(1.2)**	**(1.4)**	**(2.2)**	**-**	**(4.8)**
Total reportable segment profit/(loss)	**24.0**	**15.7**	**9.5**	**(7.5)**	**41.7**
Acquired intangible asset amortisation and impairment *note 6*					**(20.6)**
Goodwill impairment *note 7*					**(61.4)**
Share-based payment					**(0.8)**
Operating loss					**(41.1)**
Finance income					**0.3**
Finance costs					**(0.7)**
Share of loss of associate *note 8*					**(4.5)**
Loss before tax					**(46.0)**
Other information					
Product development	**61.4**	**28.1**	**22.2**	**-**	**111.7**
Expenditure on intangibles	**-**	**1.1**	**-**	**-**	**1.1**
Expenditure on property, plant and equipment	**11.6**	**3.7**	**1.9**	**0.1**	**17.3**
Intangible asset amortisation – other	**-**	**0.9**	**-**	**-**	**0.9**
Depreciation	**10.6**	**5.7**	**2.5**	**0.3**	**19.1**

3 Operating segments *continued*

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 (formerly Testing Technologies) line of business was incorporated into the Networks & Applications operating segment and reclassified from Wireless & Service Experience to Networks & Applications.

$ million	Networks & Applications[1]	Wireless & Positioning[1]	Service Assurance[1]	Corporate	Total
2015					
Revenue					
External revenue	244.0	137.2	95.9	-	477.1
Profit before tax					
Total reportable segment profit/(loss) before exceptional items	18.9	14.9	14.1	(5.8)	42.1
Exceptional items *note 5*	(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
Acquisition related costs					(0.1)
Acquired intangible asset amortisation *note 6*					(14.8)
Goodwill impairment *note 7*					(3.8)
Share-based payment					(0.8)
Operating profit					10.1
Finance income					0.4
Finance costs					(0.5)
Share of loss of associate *note 8*					(0.4)
Profit before tax					9.6
Other information					
Product development	61.5	34.3	22.5	-	118.3
Expenditure on intangibles	-	0.9	2.1	-	3.0
Expenditure on property, plant and equipment	16.6	8.8	1.1	-	26.5
Intangible asset amortisation – other	-	1.1	-	-	1.1
Depreciation	10.1	11.9	2.8	0.2	25.0

Note
1 Restated for changes to the Group's operating segments effective 1 January 2016 as set out above.

There was no inter-segment revenue in any of the above periods.

4 Geographical information

$ million	**2016**	2015
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.

5 Exceptional items

$ million	**2016**	2015
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. In addition, Spirent reviewed the sales organisation and compensation structure. The change in product line emphasis and organisational review resulted in exceptional restructuring costs.

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.

6 Acquired intangible asset amortisation and impairment

$ million	**2016**	2015
Acquired intangible asset amortisation	**12.9**	14.8
Acquired intangible asset impairment	**7.7**	-
	20.6	14.8

Acquired intangible asset impairment of $7.7 million has been charged during the year, primarily in respect of the Device Intelligence and Developer Tools lines of business.

7 Goodwill impairment

With effect from 1 January 2017 the Group's operating segments will be 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 the Chief Executive Officers Review. The most recent future cash flows for the Group have been prepared based on the new segment structure and are not available for the existing operating segments. Consequently, the cash generating units (CGUs) established for goodwill testing purposes have been reorganised to align with the operating segments from 1 January 2017.

Prior to the reorganisation of the 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 impairment charges were a consequence of the decision not to invest further in these lines of business. After the impairment charge there was no goodwill remaining in the Developer Tools or Device Intelligence CGUs. In addition, the goodwill relating to the Epitiro line of business, amounting to $0.9 million, was fully impaired as the goodwill was not supported by the anticipated future cash flows.

Following the reorganisation of the CGUs the new CGUs were tested for impairment. 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 was recognised which related 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 the new operating segment structure. The recoverable amount of the Connected Devices CGU, after the $41.3 million impairment loss, is equal to its carrying value of $70.1 million.

The impairment losses have been recognised in the consolidated income statement within other items.

8 Investment in associate

Spirent's share of the post-acquisition results of Jolata, Inc. (Jolata), amounted to a loss of $1.9 million (2015: $0.4 million loss).

During the year, the investment in Jolata was impaired by $2.6 million (2015: nil) following a review of the outlook for returns from this investment. The carrying amount for the Group's investment in the consolidated financial statements is nil (2015: $4.6 million).

The Group has no cumulative unrecognised share of losses in Jolata, Inc. (2015: nil).

9 Tax

$ million	2016	2015
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).

10 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.

$ million	2016	2015
(Loss)/profit for the year attributable to owners of the parent Company	**(42.3)**	13.3

Number million		
Weighted average number of Ordinary Shares in issue – basic	**610.6**	610.5
Dilutive potential of employee share incentives	**-**	1.7
Weighted average number of Ordinary Shares in issue – diluted	**610.6**	612.2

Cents		
(Loss)/earnings per share		
Basic	**(6.93)**	2.18
Diluted	**(6.93)**	2.17

10 Earnings per share *continued*

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
	$ 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 *note 5*	**4.8**		12.5	
Acquisition related costs	**-**		0.1	
Acquired intangible asset amortisation and impairment *note 6*	**20.6**		14.8	
Goodwill impairment *note 7*	**61.4**		3.8	
Impairment of investment in associate *note 8*	**2.6**		-	
Share-based payment	**0.8**		0.8	
Tax effect on the above items	**(14.6)**		(8.5)	
Prior year tax credit *note 9*	**(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 2016 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.

11 Dividends paid and proposed

$ million	2016	2015
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 per Ordinary Share (31 December 2014: 2.21 cents)	**14.1**	13.4
Interim dividend 2016 1.68 cents per Ordinary Share (2015: 1.68 cents)	**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 per Ordinary Share (2015: 2.21 cents)	**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 (2015: 2.21 cents), 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).

12 Reconciliation of (loss)/profit before tax to cash generated from operations

$ million	2016	2015
(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