

## Oxford Instruments plc

Report and Financial Statements 2018

## Oxford Instruments plc is a leading provider of high technology products and services to the world's leading industrial companies and scientific research communities.

We provide advanced nanotechnology solutions to a broad range of end markets.

We are proud to be recognised as the leaders in what we do and for the difference we make in the world.

### Inside this year's Report and Financial Statements

#### 01: Strategic Report

Performance Highlights
Our Business
Chairman's Statement
Chief Executive's Review
Business Model
Strategic Context
Our Strategy
Key Performance Indicators
Operations Review
Finance Review
Principal Risks
Viability Statement
Corporate Responsibility

#### 02: Governance

Leadership
Effectiveness
Accountability
Remuneration
Relations with Shareholders
Report of the Directors

#### **03: Financial Statements**

D1	Directors' Responsibilities	85
02	Independent Auditor's Report	86
06	Consolidated Statement of Income	91
08 12	Consolidated Statement of Comprehensive Income	92
14	Consolidated Statement of Financial Position	93
16 18	Consolidated Statement of Changes in Equity	94
20	Consolidated Statement of Cash Flows	96
28	Accounting Policies	98
35	Notes to the Financial Statements	105
38 40	Parent Company Statement of Financial Position	134
40	Parent Company Statement of Changes in Equity	135
49	Notes to the Parent Company Financial Statements	136
55		
51	04: Company Information	
67	Historical Financial Summary	145
31	Directors and Advisers	147

83 Oxford Instruments Directory 148

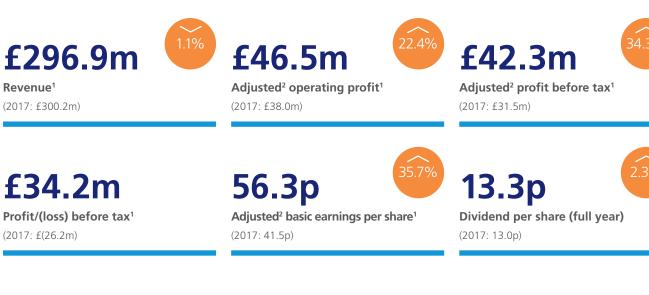


Find out more about us www.oxinst.com

Front cover image: Fully functioning gyroscope structure, 2mm across; created by a Plasma Technology system.

## Performance Highlights

It has been a positive year for the Group, with good progress in the early implementation phase of the Horizon strategy.



## £33.4m

**Cash generated from operations**<sup>1</sup> (2017: £34.5m)

#### **Financial Highlights:**

- Reported orders up 5.0% to £313.0 million (2017: £298.0 million), an increase of 5.8% at constant currency.
- Reported order book of £134.0 million as at 31 March 2018, up 5.0% (10.4% at constant currency). Excluding US Healthcare, order book up 18.4% on a constant currency basis.
- Reported revenue in line with previous year at constant currency.
- Adjusted operating profit from continuing operations up 22.4% to £46.5 million (2017: £38.0 million), with a currency benefit of £10.6 million margin increase of 300 basis points to 15.7%.
- Adjusted profit before tax from continuing operations up 34.3% to £42.3 million (2017: £31.5 million), an increase of 0.6% at constant currency.

• Profit before tax from continuing operations of £34.2 million (2017: loss of £26.2 million).

£19.7m

Net debt

(2017: £109.3)

- Net debt down significantly to £19.7 million following good operating cash flow and disposals. Profit after tax from sale of Industrial Analysis of £45.9 million and net proceeds of £71.2 million.
- Full year dividend increased by 2.3% to 13.3 pence.

#### **Operational Highlights:**

- Good progress in the early implementation of our Horizon Strategy, in particular:
  - Strong growth in orders and order book demonstrate early success from our market application focus;
  - Increased management and leadership capability across the Group;

- Transitioned to a more commercially focused, market-driven Group to address a broad range of industrial and academic markets; and
- Continued investment in R&D with increased focus on customer solutions.
- Strong financial performance across Materials & Characterisation driven by leading product portfolio and customer applications focus in growing markets.
- Good second half performance in Research & Discovery was offset by a weaker first half. Constant currency order book up 15.3%.
- Profit and margin growth in Service & Healthcare driven by services relating to our own products. Reduction in revenue from the anticipated decline in the sale of refurbished imaging systems.

1. Continuing operations.

<sup>2.</sup> Throughout these Financial Statements we make reference to adjusted numbers. A full definition of adjusted numbers can be found in Note 1. Where we make reference to constant currency numbers these are prepared on a month by month basis using the translational and transactional exchange rates which prevailed in the previous year rather than the actual exchange rates which prevailed in the year. Transactional exchange rates include the effect of our hedging programme.

## Our Business

A leading provider of high technology products and services.

#### Our business is structured around three sectors to support our customer and application focus:

# Materials & Characterisation

Products and solutions that enable the fabrication and characterisation of materials and devices down to the atomic scale, predominantly supporting customers across applied R&D as well as the production and manufacture of high technology products and devices.



**>** Find out more on page 20

# Research & Discovery

Provides advanced solutions that create unique environments and enable imaging and analytical measurements down to the molecular and sub-atomic level, predominantly used in scientific research and applied R&D.



**>** Find out more on page 23

## Service & Healthcare

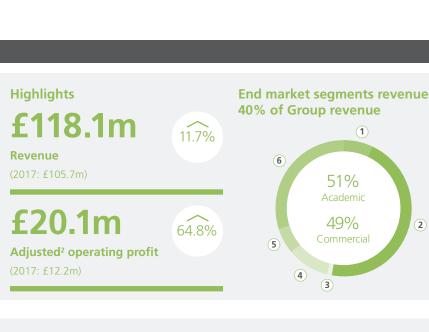


Provides customer service and support for our own products and the service, sale and rental of third-party healthcare imaging systems.



(>) Find out more on page 25

04: Company Information

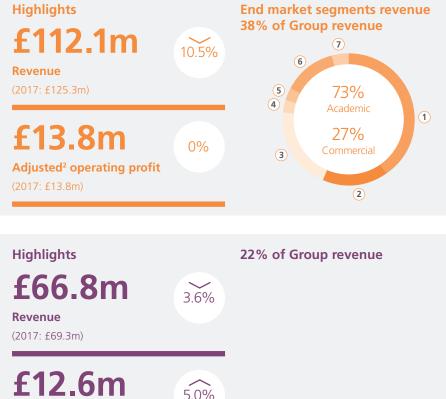


We enable the world's leading industrial companies and scientific research communities to image, analyse and manipulate materials down to the atomic and

molecular level.

Adjusted<sup>2</sup> operating profit

(2017: £12.0m)



This segment is captured within total Group revenue.

#### Our global end market segments:

#### 1 Healthcare & Life Science

Where growth is driven by demand for improvements in disease detection and the understanding of fundamental mechanisms.

#### 2 Semiconductor & **Communications**

2

Where there is a focus on speed, security and capacity.

#### 3 Quantum Technology

The exploration of the regime where quantum effects dominate and radically change the "rule book" of what is possible.

#### **4** Environment

This includes greener production, recycling, detection of hazardous substances in soil, and agriculture and food.

#### 5 Energy

Where improved efficiencies and sustainability remain core drivers, and includes work in photovoltaics and batteries.

#### 6 Advanced Materials

Where we help customers lead the race to develop lighter, stronger, higher functioning and more affordable materials.

#### **Research &** 7 **Fundamental Science**

Where we help customers develop breakthrough applications, gaining previously unknown insights.

## Our Business continued

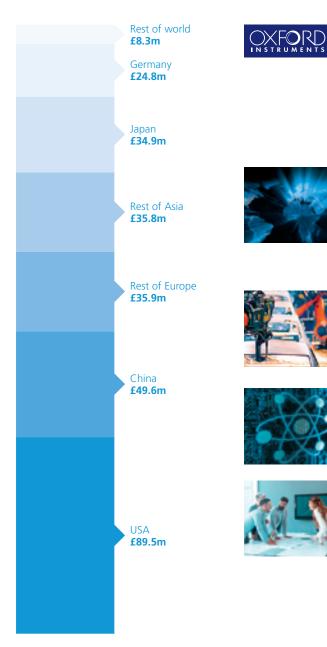
A globally recognised brand with a reputation for world-class product performance, unprecedented ease of use and excellence in service and support.



Oxford Instruments is a leading provider of high technology products and services to the world's leading industrial companies and scientific research communities to image, analyse, and manipulate materials down to the atomic and molecular level.

We are driving growth and improved returns for the benefit of all stakeholders as we embed clearly defined core capabilities across our businesses in market intimacy, innovation and product development, customer support, and operational excellence.

## Revenue from external customers by destination



Investment case

## Brand and reputation

A globally recognised brand with a reputation for world-class product performance, unprecedented ease of use and excellence in service and support. Oxford Instruments offers increased value to existing customers, as well as creating growth opportunities in new market segments, through application-specific solutions with improved workflows, bespoke analytics, data interpretation and associated support services.

## Global business

Oxford Instruments is positioned to address a broad range of markets and industrial sectors, with its key enabling technologies underpinning the shift to a greener economy, increased digital connectivity, and advances in materials, life science and healthcare. This provides a global base and comprehensive portfolio, offering diversification of opportunity and risk.

## Attractive end markets

Our end markets are robust, supported by sustained commercial and government investment. This, alongside a customer application focus and excellent core capabilities, provides strong long-term drivers for future growth and margin improvement.

## Focused investment

The Group focuses investment on market segments where nanotechnology drives product innovation, world-leading research and long-term growth for customers, where it can maintain leadership positions.

## Strong customer relationships

Through market intimacy, the Group has developed an in-depth understanding of customer needs, helping customers to accelerate their applied R&D, increase their manufacturing productivity and make new scientific discoveries. Today, nearly half of Oxford Instruments' customer base comprises commercial organisations.

## Chairman's Statement

It has been a positive year with the Group delivering a performance in line with our expectations.

The Group has continued to focus on the core capabilities of its Horizon strategy as we embed best practice across the Group. It has been a positive year with the Group delivering a performance in line with our expectations and making good progress with the Horizon strategy. Management has continued to steer our business towards a greater focus on market segments and applications, designed to help our customers advance their businesses through enhanced R&D and productivity improvement. As a result, we are already starting to see improved trading in some of our businesses and we expect progress to continue as the Horizon strategy gains momentum.

The Group has continued to focus on the core capabilities of its Horizon strategy: market intimacy, innovation and product development, customer support, and operational excellence as we embed best practice across the Group. We have also strengthened our management with new senior leaders joining the business during



the year and created new leadership roles to sharpen our commercial focus. We also successfully completed the sale of Industrial Analysis early in the second quarter of the financial year, marking a significant change to our portfolio.

Against this backdrop of activity and repositioning for long-term sustainable growth, the team maintained their focus on near-term performance. Adjusted profit before tax was up 34.3% at £42.3 million (2017: £31.5 million) driven by a strong performance from our Materials & Characterisation sector and supported by favourable currency effects. Adjusted profit before tax increased by 0.6% at constant currency. Profit before tax was £34.2 million (2017: loss of £26.2 million) and adjusted basic earnings per share on a continuing basis was up 35.7% to 56.3 pence (2017: 41.5 pence).



The management team is energised in changing the way we operate, implementing the key tenets of the Horizon strategy.

Good operating cash flow and the proceeds from the sale of Industrial Analysis led to a significant reduction in net debt to £19.7 million (2017: £109.3 million). Given the improvement in net debt and our confidence that the Horizon strategy is beginning to deliver tangible benefits, the Board has proposed to raise the final dividend to 9.6 pence (2017: 9.3 pence), giving a full-year dividend of 13.3 pence (2017: 13.0 pence), an increase of 2.3%.

As lan Barkshire sets out in his Chief Executive's Review, the management team is energised in changing the way we operate, implementing the key tenets of the Horizon strategy. This will help position the Group as a leading provider of high technology products and services to the world's leading industrial companies and scientific research communities.



I would like to thank the Board and all employees for their dedication and hard work during this time of change to reposition Oxford Instruments to deliver long-term profitable growth and sustainable value that benefits all our stakeholders.

#### Alan Thomson

Chairman 12 June 2018

# Our governance principles

#### Leadership

The Chairman is responsible for leadership of the Board and ensuring its effectiveness on all aspects of its role.

Find out more on page 49

#### Effectiveness

This year, the Board carried out its annual effectiveness evaluation exercise, including a specific review of the effectiveness of its principal Committees and members.

Find out more on page 55

#### **Risk management**

The Board has accountability for reviewing and approving the adequacy and effectiveness of internal controls, including financial, operational and compliance controls and risk management.

Find out more on page 57

#### Remuneration

The Remuneration Policy promotes the delivery of the Group's strategy and seeks to align the interests of Directors and Shareholders.

Find out more on page 67

#### Engagement

We continue to ensure our investors receive regular and transparent communications.

Find out more on page 81

## Chief Executive's Review

We have made good progress in the year with the early implementation of the Horizon strategy, which was introduced in May 2017.



#### Summary

- Materials & Characterisation performed strongly in attractive markets. We continue to invest in new product development within the sector to improve and expand our range of products and solutions.
- Research & Discovery had

   an improved second half
   performance, with recovery in
   optical microscopy systems and
   like-for-like order growth in

   Andor. An underperformance in
   NanoScience and X-ray Technology
   depressed the sector's result,
   however we are addressing the
   challenges through structural
   change and business simplification.

   These self-help actions, combined
   with positive end markets, support
   improved financial performance.
- In Service & Healthcare, OiService continues to focus on increasing after-market revenue by providing a broader range of support services, while OI Healthcare is making a strategic shift towards a higher proportion of service revenue, which is driving greater visibility of revenue and improved returns.

#### Horizon progress

We made good progress in the year with the early stages of the implementation of the Horizon strategy, launched in May 2017, and we are starting to see tangible benefits. I am encouraged by how firmly embedded the understanding of our strategy is and how positive engagement has been across the Group.

Through Horizon, we have progressed a number of areas in support of our new strategy. We have transitioned to a more commercially focused, market-driven Group through significant portfolio management and have implemented a new sector structure to align our businesses with our chosen customer segments and applications. Our three new reporting sectors are Materials & Characterisation, Research & Discovery, and Service & Healthcare.

We are now positioned to address a broad range of markets and industrial sectors, with our key enabling technologies underpinning the shift to a greener economy, increased digital connectivity and advances in materials, life science and healthcare. We do this by helping our customers to accelerate their applied R&D, increase their manufacturing productivity and make new scientific discoveries. Today, nearly half of our customer base comprises commercial organisations. We have made good progress in migrating to a market and customer-centric approach, offering solutions rather than tools. This allows us to provide more value to our existing customers, as well as creating growth opportunities in new market segments through application-specific solutions with improved workflows, bespoke analytics, data interpretation and associated support services.

For example, customers developing higher efficiency, power and longer life batteries need to understand and control the detailed chemical and electrical interactions at the nano and even atomic scale. Because battery materials are very reactive and operate within an active solution this has been extremely difficult to achieve. To solve this problem, we developed a sealed sample and imaging cell for our CypherES atomic force microscope that enables the direct measurement of these electrochemistry processes at the nanoscale for battery materials operating under their real-life conditions.

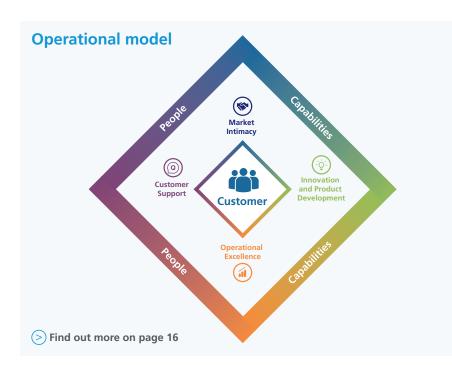
Within the automotive industry, incoming parts are inspected to control and maintain suitable levels of cleanliness and when contamination is present, stopping its re-occurrence at source is critical to maintain production. Here we developed a bespoke workflow and data interpretation package for our customer to measure the cleanliness of parts and, importantly, identify the source within the supply chain of any contaminating particles. This solution was built as an upgrade to our generic particle analysis solution. Importantly, these examples of a hardware and a software upgrade for existing product platforms can be delivered on short time frames relative to new instrument platforms to both expand our addressable markets and increase the value to our existing customers.

01: Strategic Report

02: Governance

04: Company Information

We have positioned the Group to become a leading provider of high technology products and services to the world's leading industrial companies and scientific research communities to image, analyse and manipulate materials down to the atomic and molecular level.



We have transformed the leadership team at an operational level, targeting individuals who have the specific capabilities and experience needed to accelerate our progress with Horizon, largely through external recruitment. Around 50% of our senior managers are new in their roles within the last two years; successful placements in the year include new leaders for our NanoScience and X-ray Technology businesses and a new senior role, Group Commercial Director, to lead a sharper commercial focus across our sales teams and global territories.

Through Horizon we are changing the way we operate and we are embedding clearly defined core capabilities across our businesses in Market Intimacy, Innovation and Product Development, Customer Support, and Operational Excellence. In Market Intimacy we are changing the way we reach and communicate with our customers, more effectively bringing to life the innovative and value-adding solutions that we can provide for their specific applications. As part of our move from product to solution-selling, all our sales teams have undertaken bespoke training. We have also invested in developing our digital marketing capabilities and new Group and e-commerce websites.

Innovation and Product Development remain core to our growth strategy and as part of Horizon we have established cross-sector roadmaps, which are providing a broader range of high-quality investment opportunities better aligned with our chosen markets. In customer support we have increased our breadth and range of products and services to support our customers more effectively. We are investing in a range of technologies to improve customer productivity, including remote diagnostics and predictive monitoring.

Operational excellence is delivering improved customer satisfaction and operational and logistical efficiencies. We are implementing a lean approach to our operations and are in the process of training 50 "green belt" lean leaders in different roles and functions. We have added a Head of Strategic Sourcing to drive our Group procurement programme to improve efficiencies and exploit synergies across our supply chain.

As part of our change programme we have been breaking down silos, establishing cross-business and functional working groups to extract best practice and better leverage our scale and deliver synergies. In the year we made £1.5 million of central and regional cost savings through back office and central overhead efficiencies, this partially offsetting the previous contribution from, and therefore stranded costs associated with, the divested Industrial Analysis business.

In the year we have positioned the Group to become a leading provider of high technology products and services to the world's leading industrial companies and scientific research communities to image, analyse and manipulate materials down to the atomic and molecular level. Our chosen end markets remain robust and, combined with our customer applications focus and improved core capabilities, provide strong long-term drivers for future growth and margin improvement.

## Chief Executive's Review continued

Performance was underpinned by significant growth in the Materials & Characterisation sector and improved performance from Service & Healthcare.

The order book increased by 5.0% to £134.0 million (2017: £127.6 million)

Adjusted profit before tax increased by 34.3% to £42.3 million (2017: £31.5 million)

#### Results

The following results exclude discontinued operations.

The Group delivered a performance in line with expectations, supported by a currency tailwind and strong second half trading. This was underpinned by significant growth in the Materials & Characterisation sector and improved performance from Service & Healthcare, offset by weaker trading in the Research & Discovery sector despite a positive uplift in the second half of the year.

Reported orders for the Group were up 5.0% (5.8% at constant currency) to £313.0 million (2017: £298.0 million). Excluding orders from our US Healthcare business, constant currency orders were up 8.9% against the previous period. We continue to see increased demand from commercial and academic customers engaged in applied R&D as well as production and manufacturing of high technology products and devices. This has driven a strong performance within Materials & Characterisation, with double-digit growth across the US, Europe and Asia, as well as increased demand for services relating to our own products. Research & Discovery orders were broadly in line with the previous year, maintaining a similar geographical split.

Reported revenue was broadly in line with the previous year at £296.9 million (2017: £300.2 million), and level at constant currency supported by a strong second half performance, with good growth in Materials & Characterisation and services related to our own products. This was offset by reduced volumes in Research & Discovery in line with the phasing of orders, the delivery of longer lead time items and lower revenues associated with the sale of third-party systems in OI Healthcare. On a geographical basis, underlying revenue growth in Europe and Asia was offset by reduced sales in North America, with Materials & Characterisation having strong growth across all territories.

The order book, representing orders for future delivery, increased by 5.0% to £134.0 million (2017: £127.6 million), growth of 10.4% at constant currency. Excluding our US Healthcare business, the constant currency order book is up 18.4%, with strong growth across Materials & Characterisation, Research & Discovery, and the service of our own products.

Currency effects drove adjusted operating profit up 22.4% to £46.5 million (2017: £38.0 million), a decline of 5.5% at constant currency. Adjusted operating margin rose to 15.7% for the Group (2017: 12.7%), supported by the currency tailwind.

Adjusted profit before tax increased by 34.3% to £42.3 million (2017: £31.5 million), with an increased contribution from Materials & Characterisation and Service & Healthcare and a lower contribution from Research & Discovery. Adjusted profit before tax was up 0.6% at constant currency. Profit before tax of £34.2 million compared favourably to a loss of £26.2 million last year.

Continuing adjusted basic earnings per share grew strongly by 35.7% to 56.3 pence (2017: 41.5 pence).

We delivered a significant reduction in net debt in the period to £19.7 million (2017: £109.3 million) due to ongoing strengthening of the balance sheet throughout the year, resulting from good operating cash flow, proceeds from the sale of the Industrial Analysis business and the sale of two properties.

02: Governance

#### Sector performance

Turning to the individual sector performance:

Materials & Characterisation products and solutions enable the fabrication and characterisation of materials and devices down to the atomic scale, predominantly supporting customers across applied R&D as well as the production and manufacture of high technology products and devices. Building on a positive first half year, the sector delivered strong growth and overall performance with positive contributions from NanoAnalysis, Asylum Research and Plasma Technology. Reported orders grew in the period by 22.7% to £129.5 million (2017: £105.8 million). Reported revenue grew by 11.7% to £118.1 million (2017: £105.7 million), with reported adjusted operating profit increasing to £20.1 million (2017: £12.2 million) and reported adjusted margin up to 17.0%. The order book for future deliveries increased by 36.8% to £34.2 million (2017: £25.0 million), providing positive momentum. The sector is already benefiting from a number of key initiatives within the Horizon strategy, particularly the focus on customer-orientated solutions that are tailored to provide application-specific workflows and process recipes, information and analytics.

Research & Discovery provides advanced solutions that create unique environments and enable imaging and analytical measurements down to the molecular and sub-atomic level, predominantly used in scientific research and applied R&D. Reported orders of £118.2 million (2017: £120.1 million) were broadly in line with the previous year, with continued growth in quantum solutions, an increased demand for our benchtop NMR products and an increase in order intake in the second half for our optical microscopy products, offset by lower orders for scientific X-ray tubes. Reported revenue of £112.1 million was down 10.5% on the previous year (2017: £125.3 million), due to the softer first half performance of our optical microscopy products and the higher proportion of longer lead time customised cryogenic and magnet system orders. The stronger second half orders resulted in an increase in order book of 11.7% to £59.0 million, (2017: £52.8 million). Reported adjusted operating profit was in line with previous year at £13.8 million (2017: £13.8 million) with an improved reported adjusted margin of 12.3% (2017: 11.0%).

Service & Healthcare provides customer service and support for our own products and the service, sale and rental of third-party healthcare imaging systems. Reported orders for the period of £65.6 million (2017: £72.2 million) were down 9.1% as reported (7.8% at constant currency) due to reduced orders within our US Healthcare business. Reported orders for services related to our own products grew 3.7% to £39.0 million (2017: £37.6 million). Reported revenue of £66.8 million (2017: £69.3 million), down 3.6% on the previous year, was due to lower shipments of refurbished third-party medical imaging systems. This more than offset reported revenue growth of 6.9% for services related to our own products to £38.8 million (2017: £36.3 million). Reported adjusted operating profit rose to £12.6 million (2017: £12.0 million), an increase of 5.0%, while reported adjusted operating margin increased to 18.9% (2017: 17.3%).

#### R&D

One of the core elements of our Horizon strategy is innovation and product development. We invested £24.8 million (2017: £25.8 million), with an increased emphasis on the solutions and technology that will increase value for our customers through new capabilities, ease of use, enhanced productivity and application-specific information. We monitor the proportion of our revenue which originates from products launched in the last three years (our vitality index). Our vitality index for the reported period increased to 37% (2017: 30%), reflecting the successful uptake of recently launched products.

#### People

Our staff are fundamental to our business success and I have been encouraged by how they have engaged with the Horizon strategy to improve our business. We continue with our focus to enhance the capabilities of our teams through the development of existing employees and investment in new talent.

I would like to thank all our employees for their commitment to Oxford Instruments, and for their ongoing enthusiasm to help our customers.

#### Outlook

Our chosen end markets remain attractive, supported by commercial and government investment. Our growing order book, customer application focus and drive for operational efficiencies provide confidence for the year ahead.

We expect to see an improvement in performance on a reported basis after allowing for the impact of an anticipated currency headwind, based on current exchange rates.

#### Ian Barkshire

Chief Executive 12 June 2018

## Business Model

We are a globally recognised brand with a reputation for world-class product performance, unprecedented ease of use and excellence in service and support.

#### **Relationships and resources**

Customer relationships	We are a leading provider of high technology products and services to the world's leading industrial companies and scientific research communities. We enable our customers to image, analyse and manipulate materials down to the atomic and molecular level. We have implemented a new sector structure to align our businesses with our chosen customer segments and applications.
Continuous innovation	We focus our investment on market segments where nanotechnology drives product innovation, world-leading research and long-term growth for our customers and where we can maintain leadership positions. We use the insights we get from our market intimacy to drive our development priorities and to ensure future higher returns on our innovation.
Our people	We have invested in building a new management and leadership team across the business as well as defining and building on the core capabilities we need to succeed. This includes undertaking professional sales skills training, internal workshops on the Jobs to be Done methodology and operational excellence lean training. We are developing a culture of accountability, empowering our employees to own the challenge and the solution.
Our infrastructure	The significant management we have undertaken of our portfolio has delivered a more focused, synergistic Group. We are creating greater value by breaking down silos, establishing cross-business and cross-functional working groups to extract best practice and better leverage our scale and synergies.
Supplier partnerships	We recognise that relationships built on trust and respect with our business partners establish mutually beneficial relations. We perform regular inspections and audits and have strategic reviews in place for key suppliers. We have a Group supplier management process in place that promotes a common supply chain strategy driving the business towards fewer, high level, quality suppliers. In support of this we have recruited a Head of Strategic Sourcing.

#### How we do it

Horizon strategy: This drives our direction, initiatives and operating model.

Market Intimacy

We develop an in-depth understanding of our customers' segments and align our innovation and product development initiatives to customers' strategic roadmaps.

## Product Development

We will focus our R&D nvestment on higher growth segments, prioritising our efforts on the most valuable product development opportunities.

#### Our offering

Imaging, analysis and manipulation is critical from fundamental research into applied R&D and commercial markets; enabling commercial exploitation and fundamental discovery of nanotechnology.

## 5 Fundamental research

Providing solutions to those wishing to explore new frontiers at the nanoscale.

**Physical & Life Sciences** 

Innovation approach

**Product** application insight

## Q Applied R&D

Providing solutions to enable the opportunities offered by nanotechnology to develop more advanced products.

Market insight

Product application insight

## Commercial markets

Providing products to support today's manufacturing challenges and create new opportunities.

QA/QC

02: Governance

04: Company Information

Our ability to image, understand and control matter at the nanoscale enables a revolution in technology and industry that advances and benefits society.

Operational

Excellence

We target improvements

become a more delivery and outcome-focused business.



Customer

Support





#### What we deliver

Creating value for customers through solutions

Thought leadership

Rewarding careers

Corporate responsibility

Shareholder value

Strong financials We provide advanced nanotechnology solutions to a broad range of end markets, supported by new product offerings and personalised customer support. We enable our customers to accelerate their R&D, increase productivity and make new scientific discoveries.

Our key enabling technologies provide the basis for innovation across a range of markets and industrial sectors and help underpin the shift to a greener economy, increased digital connectivity, advances in materials, life science, manufacturing and healthcare.

We are proud to be widely recognised as leaders in what we do and for the difference we make in the world. We have high performance expectations and, by working together, our committed and skilled employees make a real impact. We are committed to being the company where the best people in our sector want to work.

Corporate responsibility is integral to our ongoing business success. It reminds us of the need to minimise our impact on the environment, encourages us to pay attention to the needs of our customers, employees and investors, and to build engagement with local communities.

The business is underpinned by sound financial management. By achieving sustainable revenue growth and margin improvement, we are well placed to deliver business growth and maximise shareholder returns over the long term.

We have positioned the Group to become a leading provider of high technology products and services to the world's leading industrial and scientific research companies. Our chosen end markets remain robust and, combined with our customer applications focus and improved core capabilities, provide strong long-term drivers for future growth and margin improvement.

## Strategic Context

Our strategy of deploying nanotechnology for industry and research is unique and powerful.

We previously used growth in the convergence of sciences to build our market position. Convergence is now well established, and our customers are now focused on the application of convergence and nanotechnology to help address many of the world's greatest challenges and help underpin the shift to a greener economy, increased digital connectivity, advances in materials, life science, manufacturing and healthcare.

Within academic research, funding is increasingly being targeted towards nanotechnology applications that are building on the initial foundations of convergence. Our industrial research and corporate customers are increasingly focused on exploiting nano-enhanced properties in their commercial applications and the development of new advanced systems and devices.

To support our customers' new requirements, we will build our leadership in exploiting our expertise, skill and intellectual property to image, analyse and manipulate materials, structures and devices down to the molecular and atomic scale. We will focus our investment on those market segments where nanotechnology drives long-term growth for our customers and where we can maintain or grow into leadership positions. We will move up the value chain, providing our customers with solutions, information and support to increase their capabilities and productivity in line with their evolving requirements.

We have called our new strategic focus Horizon. It is a transformational programme for the Group and will drive both our future direction and our operational model, returning us to long-term sustainable growth with improved margins.



We focus on market segments where nanotechnology drives product innovation, world-leading research and long-term growth for our customers and where we can maintain leadership positions.

#### **Growth drivers**

The key markets with long-term growth drivers where we can maintain or grow leading positions are:





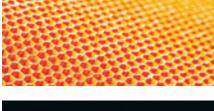
#### Healthcare

where growth is driven by demand for improvements in disease detection and the understanding of fundamental mechanisms.

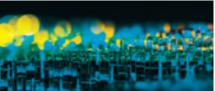
**Energy** where improved efficiencies and sustainability remain core drivers and includes work in photovoltaics and batteries.



#### IT and communications where there is a focus on speed, security and capacity.



#### **Advanced materials** where we can help customers lead the race to develop lighter, stronger, higher functioning and more affordable materials.



#### Quantum technology

is the exploitation of the regime where the exotic quantum effects dominate and radically change the "rule book" of what is possible.

## Our Strategy

Horizon is a transformational programme for Oxford Instruments that will reposition the Group for long-term sustainable growth with improved margins.

#### **Our strategy**

Through Horizon, we have transitioned to a more commercially focused, market-driven Group through significant portfolio management and have implemented a new sector structure to align our businesses with our chosen customer segments and applications. By aligning closely with our customers' needs and through a better understanding of their challenges, we ensure we offer world-class produce performance, unprecedented ease of use and excellence in service and support that will add value to our customers' capabilities and productivity.

We are now positioned to address a broad range of markets and industrial sectors, with our key enabling technologies underpinning the shift to a greener economy, increased digital connectivity, and advances in materials, life science and healthcare.

Our Horizon strategy has the following key elements:

- we will focus our investment on market segments where our nanotechnology drives long-term growth for our customers and where we can maintain or develop leadership positions;
- we will be a more commercially focused, market-driven Group by maintaining our heritage in supporting fundamental research whilst increasing our focus on solutions for applied R&D and products that can support our commercial manufacturing and production customers;
- we will drive the delivery of synergies and enhanced collaboration. For example, in R&D we will prioritise our high-impact projects and resource them from across the Group;
- we will provide more value to our existing customers, as well as creating growth opportunities in new market segments through application-specific solutions with improved workflows, bespoke analytics, data interpretation and associated support services; and
- we will transform our operational model to embed consistency and excellence across our businesses, measured by clearly defined core capabilities that will enhance our competitive advantage.

#### **Operational model**



Horizon will change the way by which we operate



#### Market Intimacy:

We develop an in-depth understanding of our customer segments and tailor our solutions to more closely meet customer needs. Insights from our stronger customer relationships will better inform and align our innovation and product development initiatives to customers' strategic roadmaps.

#### **Progress during** the year

In Market Intimacy we are changing the way we reach and communicate with our customers, more effectively bringing to life the innovative and value-adding solutions that we can provide for their specific applications. As part of our move from product to solution-selling, all our sales teams have undertaken bespoke training. We have also invested in developing our digital marketing capabilities and have launched new Group and e-commerce websites.

-`(	5.	
	- ا	

#### **Innovation and Product Development:**

and will embed clearly defined core capabilities

across our businesses in the following areas:

We focus our R&D investment on higher growth segments, prioritising our efforts on the most valuable product development opportunities. Importantly, our new operating model will enhance our ability to leverage the technical capabilities and synergies across the Group to ensure the more effective delivery of our chosen priority projects.

1	
(	(Q)

#### Customer Support:

We build on the growing customer demand for a higher level and broader range of services and support to help meet their evolving commercial and strategic needs. Service will become a core differentiator in our markets



#### **Operational Excellence**:

We target improvements in cost, time and defects to deliver a world-class experience for Oxford Instruments' customers. Operational excellence will drive us to become a more delivery and outcome-focused business.

01: Strategic Report

02: Governance

#### **Progress during** the year

Operational Excellence is delivering improved customer satisfaction and operational and logistical efficiencies. We are implementing a lean approach to our operations and are in the process of training 50 "green belt" lean leaders in different roles and functions. We have added a Head of Strategic Sourcing to drive our Group procurement programme to improve efficiencies and exploit synergies across our supply chain.

#### **Progress during** the year

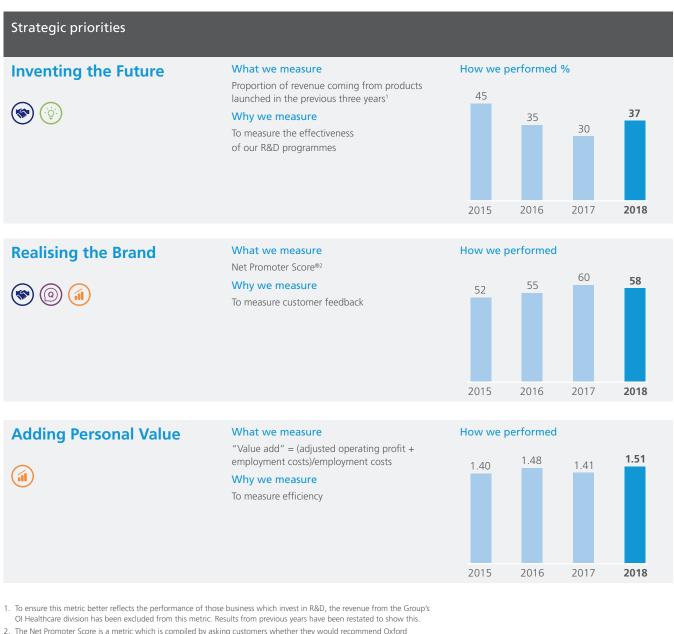
Innovation and Product Development remain core to our growth strategy and as part of Horizon we have established cross-sector roadmaps, which are providing a broader range of high quality investment opportunities better aligned with our chosen markets.

#### **Progress during** the year

In Customer Support we have increased our breadth and range of products and services to support our customers more effectively. We are investing in a range of technologies to improve customer productivity, including remote diagnostics and predictive monitoring.

## Key Performance Indicators

The Group uses a range of measures to monitor progress against its strategic plans. The key performance indicators are presented below:



- 2. The Net Home People's a finite winth complete by baking customers when the word recommend oxidit Instruments to a friend or colleague. Customers give a score between zero and ten. Those customers who score nine or ten are promoters, those customers who score seven or eight are neutral and customers who score six or less are detractors. The Net Promoter Score is the difference between the numbers of promoters and the number of detractors (both expressed as a percentage of the number of replies received). The score can range between -100 (no customers are promoters) and +100 (all customers are promoters). A positive score indicates that the Company has fewer detractors than promoters.
- 3. Calculated as adjusted operating profit divided by revenue.
- 4. Cash conversion is defined as the ratio of cash generated from continuing operations before non-recurring items and acquisition related costs, and pension scheme payments, less, capitalised development expenditure and net capital expenditure on property, plant and equipment to adjusted operating profit (see Income Statement).
- Calculated as adjusted operating profit less amortisation (but before impairment) of intangible assets divided by capital employed. Capital employed is defined as assets (excluding cash, tax and derivative assets) less liabilities (excluding tax, debt, derivative and pension liabilities).



## **Operations Review**



# Materials & Characterisation

Building on a positive first half year, the sector delivered strong growth and overall performance.

# 11.7% £118.1m 64.8% £20.1m Adjusted<sup>2</sup> operating profit 17.0% Adjusted<sup>2</sup> operating margin £17.3m Profit before tax For definition refer to note on page 1 of highlights. Details of adjusting items can be found in Note 1 of these Financial Statements.





## This sector is comprises of NanoAnalysis, Asylum Research and Plasma Technology.

This sector has a broad customer base across a wide range of applications for the imaging and analysis of materials down to the atomic level and the fabrication of semiconductor devices and structures through our range of advanced etch and deposition processes and systems. Our market-leading product performance combined with customer-focused solutions is driving strong growth by providing increased value to existing customers and the identification of and reach into new markets and applications. We are providing new capabilities, ease of use and enhanced productivity through application-specific workflows, processes, analytics and information. Revenue in Materials & Characterisation comes from a broad range of end applications with about three-quarters from the Semiconductor & Communications and the Advanced Materials related customer segments. Industrial and commercial customers represent 49% of revenue, with the balance either academic or government funded.

Materials & Characterisation delivered strong order, revenue and profit growth supported by the successful launch of new products, our increased customer application focus, the tailoring of products to provide dedicated solutions and general growth within our end markets. From a geographic perspective, strong growth was seen across Europe, the US and Asia. Sales of our imaging and analysis products and solutions used in electron microscopy had strong growth, with placements in the world's leading academic, semiconductor and advanced manufacturing facilities, as well as top forensic laboratories, where customers seek rapid, automated solutions to their analysis challenges. The launch of Symmetry, our super-fast material structure analyser, was a key driver in both the advanced materials and environmental markets, enabling productivity improvements for our customers in terms of the speed, high-resolution and accuracy of analysis.

The introduction of our Ultim<sup>™</sup> range of large area X-ray detectors has driven strong sales within the semiconductor market by providing unprecedented resolution and analysis of semiconductor structures and devices. A range of applications are benefiting from the enhanced capabilities we offer, including fault finding and failure analysis within devices for the leading semiconductor manufacturers and cleanliness control in precision manufacturing. Other applications that are utilising our Ultim<sup>™</sup> product range include solar cells and batteries, where researchers are working to improve performance and storage density by better understanding their structure at a nanoscale. The sensitivity of the Ultim™ Extreme is providing new market opportunities within the life science and pharmaceutical markets where it is providing further insight and understanding of disease processes and can aid the identification of counterfeit prescription drugs.

We saw strong order, revenue and profit growth for our scanning probe microscopy products. This has been largely supported by the strong uptake we have had for our market-leading Cypher portfolio and increased orders for our updated entry level platform, with advanced ease of use providing market-leading performance at a value price point. CypherVRS™, the first and only full-featured video-rate atomic force microscope (AFM), is generating strong interest across a diverse range of biological and physical science applications, where the visualisation of dynamic processes at a molecular or atomic level provides new insights and information for research and applied R&D. Examples include the imaging of viruses, molecular and cellular dynamics, and semiconductor etch processes.

Our electrochemistry sample cell upgrade for our CypherES™ AFM provides high-resolution imaging in real device operating conditions. The advanced environmental control enables those researching the development of lithium-ion batteries and emerging solid-state energy storage systems to better understand and characterise performance in real life conditions.

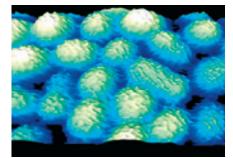
We have strengthened our customer application focus with the release of a photovoltaics package for our MFP™ AFM. This offers a convenient, high-performance turnkey solution for materials scientists that are seeking to improve the efficiency, reduce manufacturing costs and lengthen solar cell lifetimes.

### Operations Review continued Materials & Characterisation

In addition to the many varied research applications for our advanced AFM systems, our entry-level portfolio is ideally positioned to provide the simpler, routine measurements such as thin film roughness and uniformity at nanometre and even sub-nanometre length scales that are inaccessible to other metrology tools. Our updated MFP Origin+<sup>™</sup> has seen good growth across a broad range of application areas due to its high level of performance, ease of use and appropriate price point.

We had good growth from our semiconductor processing systems that provide etch and deposition process solutions used across a range of semiconductor, device and materials applications. We have leading expertise in the processing of compound semiconductors, which are critical for enabling more compact devices, higher speeds, larger capacity and higher energy efficiencies required to deliver the functionality and demands for big data, IoT, AI, high speed communications and autonomous vehicles. Growth has been supported by the development of new process recipes aligned to these growing markets, including the fabrication of sensors and MEMS, which are used across a broad range of optical devices and communications systems to provide higher speeds; and the development of advanced lasers used across a broad range of photonics markets including Vertical Cavity Surface Emitting Lasers (VCSELs) for facial recognition applications.

Customers working in these markets value our expertise and development capabilities, large portfolio of processing recipes and our applications support to help them manufacture new devices repeatedly, with the required quality for new and demanding applications. We have seen growth in both applied R&D and the expanding specialist production markets for the manufacture of commercial systems, with specialist production now representing almost half the sales in this market.





- 1: Image of a live virus captured by the Cypher VRS.
- 2: An example of a compound semiconductor wafer.

# 02: Governance

# P Research & Discovery

Orders for the sector were broadly in line with the previous year; revenue was down on the previous year.

10.5%

0%

# £112.1m

**Revenue** (2017: £125.3m

## £13.8m

Adjusted<sup>2</sup> operating profit (2017: £13.8m)

## 12.3%

Adjusted<sup>2</sup> operating margin (2017: 11.0%)

# £4.1m

Profit before tax

(2017: (£3.0m))

1. For definition refer to note on page 1 of highlights.

 Details of adjusting items can be found in Note 1 of these Financial Statements.

Growth at constant currency



### Operations Review continued

Research & Discovery

This sector includes Andor Technology, NanoScience & Magnetic Resonance, X-ray Technology and our minority share in ScientaOmicron.

This sector provides advanced solutions that create unique environments and enable imaging and analytical measurements down to the molecular and sub-atomic level, used predominantly in fundamental and applied research. We are able to build on our relationships with customers working on breakthrough applications in research to gain insights and support future commercial applications. We have strong brand recognition and leading product performance with 73% of sales into research communities and 23% into industrial customers predominately for use in applied R&D.

In this sector, 40% of revenue comes from customers working within Healthcare & Life Science applications. Customers exploring new semiconductor materials and devices make a significant contribution, and an increasing share is coming from customers working in quantum technology applications and research. Quantum Technology is a strong growth area for the sector due to increased government and corporate funding for applications such as quantum information processing and quantum sensors. Research & Fundamental Science contributes 4% of revenue.

Orders for the sector were broadly in line with the previous year, with like-for-like growth in Andor and Magnetic Resonance offset by lower orders from X-ray Technology, with NanoScience broadly in line with last year. From a geographic perspective, orders from Europe and the US were broadly in line with previous year, with increases from Rest of World offsetting slight declines in Asia. Revenue and profitability in the sector were impacted by three particular product areas that more than offset growth across the broad range of the portfolio. As previously reported, there was a softer financial performance from our Andor optical microscopy systems in the first half of the year as we transitioned from third-party systems to our own portfolio; lower revenues from NanoScience as they worked through a high volume of complex specialised systems at lower margins; and lower volumes of our scientific X-ray tubes in X-ray Technology.

Our NanoScience business is underperforming relative to its potential and is in transition as part of our Horizon programme. The quality and complexity of the order book negatively impacted performance in the year despite an improved second half performance. The current year is expected to be impacted by the remaining tail of complex systems within the order book. We have a new leadership team and self-help plan in place to increase the emphasis on margin, drive a stronger commercial focus and deliver organisational efficiencies.

We had order growth for our customised high magnetic systems for national science facilities, building on our strong reputation in this sector. We increased sales of our ultra-low temperature portfolio driven by the increasing demand for systems and solutions to support quantum research and quantum information processing. We are moving towards more standardised solutions designed specifically for this growing market. Our combined cryogenic and magnetic solutions grew in the year with the launch of a new range of measurement probes, providing more complete solutions for the measurement of 2D materials, such as graphene. Andor had significantly higher order intake in the second half of the year, driven by new product launches and the broadening of our optical microscopy portfolio. Lower revenue in the period, partly due to phasing of orders, has resulted in a significant increase in the order book for future deliveries.

We continue to develop our range of market-leading scientific research cameras and have seen growth from application areas requiring higher performance, faster collection and increased sensitivity. Our specialised deep-cooled, large area, high sensitivity cameras have provided good growth in astronomy, as researchers look for more accurate and detailed information with better spectral performance to enable deep space imaging, solar astronomy and near-earth object observation. Our world's first super-resolution microscopy camera, iXon-SRFF™, allows customers to observe biological features at resolutions significantly smaller than the wavelength of light to reveal unprecedented details in living cells, helping to build an understanding of the complex intracellular mechanisms that underlie a wide range of disease states. This image enhancement, which is only available on Andor cameras, overcomes frustrations with the complexity of sample preparation and the added expense of current super-resolution microscopes enabling customers to achieve super-resolution capability with a more affordable microscope and standard sample preparation techniques.

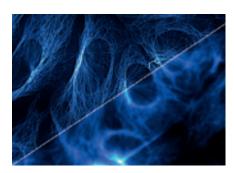
We continue to benefit from our connections to many Quantum Imaging centres of excellence that have been established in support of this rapidly growing and well-funded market. Our single photon sensitive cameras saw growing demand from researchers investigating and developing quantum optics, which are required for communication systems and exotic imaging solutions, for example those that can look through smoke or around corners.

Our optical microscopy platform, Dragonfly™, saw strong growth in the second half of the year as we introduced a complementary lower price point model to the portfolio, enabling the product range to address a much broader end market. Dragonfly<sup>™</sup> provides the capability to quickly image large samples and reveal detail previously not seen in applications such as neuroscience, cancer research and regenerative science. The product received an R&D Top 100 award, recognising the revolutionary technology and superior performance. We also saw good growth from our Imaris<sup>™</sup> visualisation software due to its ability to capture, process and visualise the extremely large data sets captured by modern instrumentation, with data analysis and interpretation becoming an increasing part and value of the overall product solution. Imaris<sup>™</sup> is sold for use on our own and other optical microscopy systems.

We saw increased demand for our benchtop Nuclear Magnetic Resonance solutions, which provide essential information about the identification and quantification of foods and chemicals for academic and industrial researchers and for quality assurance and control. Revenue and order growth has been driven by our enhanced Pulsar<sup>™</sup> and the recently launched MQC+<sup>™</sup> systems. In the second half of the year we saw growth in the energy generation and storage sector following increasing oil prices, capitalising on developments made across our application-specific Geospec range of products.

Our X-ray source business continued to grow in the medical and research market segments but experienced greater than expected headwinds in the material characterisation and industrial applications, leading to a drop in the year-on-year revenue. This was in part driven by the delayed introduction of new products for these markets and pricing pressures in China.

The ScientaOmicron joint venture created the largest player in the ultra-high vacuum surface science field. The Group has a 47% share in the joint venture. The business delivered an improved financial performance for the year, with our share of adjusted operating profit at £0.4 million against a loss of £0.8 million last year. After our year end, the business sold its UK-based ultra-high vacuum products division. This is in line with the strategy to focus on providing core surface science products and solutions.





- 1: Internal cell structure showing the additional clarity when captured with iXon SRRE.
- 2: Mining is one of the key areas where there has been increased demand for the Geospec range of products.

## **Operations** Review



Increased profitability and margin in the sector was driven predominantly by increased demand for services relating to our own products.

## £66.8m

## 3.6%



Revenue (2017: £69.3m)

## £12.6m



Adjusted<sup>2</sup> operating profit (2017: £12.0m)

# 18.9%

Adjusted<sup>2</sup> operating margin (2017: 17.3%)

# £10.6m

Profit before tax

(2017: (£0.2m))

1. For definition refer to note on page 1 of highlights.

Financial Statements



Growth at constant currency



TTTTTT

MRI scanner inside a mobile imaging unit from our Healthcare business.

04: Company Information

This sector comprises the Group's maintenance service contracts, billable repairs, training and support services, and spare part sales.

The Service & Healthcare sector comprises the Group's maintenance service contracts, billable repairs, training and support services, and spare part sales related to Oxford Instruments' own products under the OiService brand; and the sale, service and rental of refurbished third-party MRI and CT machines under the OI Healthcare brand.

The Service & Healthcare sector increased profitability and margin in the period, driven predominantly by increased demand for the services related to our own products. Revenue and order growth from our service offerings relating to our own products were more than offset by a decline from US OI Healthcare business. This was due to a combination of the timing of sales prospects and the previously reported structural changes in the market by OEM providers.

OI Healthcare made good progress, with increased orders in the second half of the year, in line with the implementation of our strategy to move to a higher proportion of service contracts relative to the sale of refurbished systems. Revenue was down in the year but through structural changes in line with our strategy, profitability was in line with last year, providing a solid platform for future growth. Within OiService we continue to drive our enhanced customer support offerings, adapting to our customers' needs, for example with remote diagnostics and online self-help. We are designing product platforms to enable service upgrades delivering either performance enhancements or application-specific solutions. This increases value and builds versatility for our customers as well as growth in aftermarket revenue. Our new e-commerce website makes it easier for customers to find and purchase consumable items and accessories and we have seen a corresponding increase in associated revenue.

Growth in service contracts related to our optical imaging analysis software has been driven by the value customers place on having annual updates and access to our in-house analysis experts. Across the Oxford Instruments Group we provide extensive customer training programmes designed to increase their capability and productivity. This year we also held many very successful global application seminars with research and application scientists, most notably a new microscopy summer school run in collaboration with the Chinese Academy of Sciences.





- Enhanced customer support offerings include interconnectivity, remote diagnostics and online self-help.
- 2: A look inside a mobile imaging unit.

## Finance Review

Adjusted profit before tax from continuing operations grew by 34.4% to £42.3 million.



#### **Summary**

- Reported revenue in line with previous year at constant currency.
- Adjusted profit before tax from continuing operations up 34.3% to £42.3 million.
- Net debt down significantly to £19.7 million following good operating cash flow and disposals.
- Full year dividend increased by 2.3% to 13.3 pence.



(2017: £300.2m)





During the financial year the Group disposed of its Industrial Analysis business and this has been treated as a discontinued operation in the Financial Statements. Accordingly, the numbers detailed in the Finance Review refer to continuing operations and exclude the results of Industrial Analysis in both the current and prior periods.

Reported orders increased by 5.0% to £313.0 million (2017: £298.0 million), an increase of 5.8% at constant currency. At the end of the period the Group's order book for future deliveries stood at £134.0 million (2017: £127.6 million), growth of 5.0% on a reported basis and 10.4% at constant currency.

Reported revenue declined by 1.1% to £296.9 million (2017: £300.2 million). Revenue, excluding currency effects, was broadly in line with last year, with the movement in average currency exchange rates over the last year reducing reported revenue by £3.1 million.

Adjusted operating profit from continuing operations increased by 22.4% to £46.5 million (2017: £38.0 million). Adjusted operating profit from continuing operations, excluding currency effects, declined by 5.5%. Adjusted operating margin from continuing operations increased by 300 basis points to 15.7% (2017: 12.7%).

Adjusted profit before tax from continuing operations grew by 34.3% to £42.3 million (2017: £31.5 million). A pre-tax adjusted profit of £0.5 million from the Industrial Analysis business for the three months of ownership, prior to its sale on 3 July 2017, is included in discontinued operations. For the twelve months to 31 March 2017, the Industrial Analysis and Superconducting Wire businesses delivered an adjusted profit before tax of £5.6 million. Including discontinued operations, the Group achieved reported adjusted profit before tax of £42.8 million (2017: £37.1 million). Adjusting items include amortisation of acquired intangibles of £10.9 million and a net gain of £1.7 million for business reorganisation items. Our share of an impairment in our equity accounted associate was £2.0 million and the movement in the mark-to-market valuation of currency hedges for future years gave rise to a gain of £3.1 million.

Adjusted profit before tax from continuing operations of £42.3 million (2017: £31.5 million) represents a margin of 14.2% (2017: 10.5%). After adjusting items, the Group recorded a profit before tax of £34.2 million from continuing operations (2017: loss of £26.2 million).

Continuing adjusted basic earnings per share grew by 35.7% to 56.3 pence (2017: 41.5 pence). Continuing basic earnings per share was 34.3 pence (2017: loss of 44.7 pence).

Cash generated from operations fell by £1.1 million to £33.4 million (2017: £34.5 million), representing 68.8% (2017: 90.3%) cash conversion. Cash conversion is defined as: cash generated from operations before business reorganisation items and pension scheme payments, less capitalised development expenditure and capital expenditure/adjusted operating profit. Net debt decreased from £109.3 million to £19.7 million, representing a net debt to EBITDA ratio (for banking covenant purposes) of 0.3 times; our banking covenant is set at 3.0 times.

Adjusted operating profit is stated before impairment and amortisation of goodwill and acquired intangibles, business reorganisation items, the mark-to-market valuation of unexpired currency hedges, and other adjusting items, as set out in Note 1 to the Financial Statements.

#### **Income Statement**

The Group's Income Statement is summarised below.

	Year ended 31 March 2018 £m	Year ended 31 March 2017 £m	Change
Revenue	296.9	300.2	(1.1%)
Gross profit	150.9	157.3	(4.1%)
Administrative expenses	(105.8)	(106.5)	
Share of profit/(loss) of associate	0.5	(0.8)	
Foreign exchange	0.9	(12.0)	
Adjusted operating profit	46.5	38.0	+22.4%
Net finance costs	(4.2)	(6.5)	
Adjusted profit before tax	42.3	31.5	+34.3%
Amortisation of acquired intangibles	(10.9)	(12.5)	
Impairment of goodwill and intangibles	_	(36.7)	
Impairment of investment of associate	_	(8.0)	
Business reorganisation items	1.7	(1.7)	
Share of impairment recognised by associate	(2.0)	_	
Mark-to-market of currency hedges	3.1	1.2	
Profit/(loss) before tax	34.2	(26.2)	
Tax from continuing operations	(14.6)	0.7	
Profit/(loss) for the period from continuing operations	19.6	(25.5)	
Adjusted effective tax rate <sup>1</sup>	23.9%	24.8%	
Continuing adjusted earnings per share – basic	56.3p	41.5p	+35.7%
Earnings per share – basic	114.5р	(35.6)p	
Continuing adjusted earnings per share – diluted	56.1p	41.4p	+35.5%
Earnings per share – diluted	114.1p	(35.6)p	
Dividend per share	13.3p	13.0p	+2.3%

1. The adjusted effective tax rate is calculated excluding impairment of non-current assets, amortisation on acquired intangibles, business reorganisation items, the mark-to-market of financial derivatives, and other adjusting items.

## Finance Review continued

#### Income Statement continued

#### Revenue

Orders, at constant currency, increased by 22.8% for Materials & Characterisation, with good growth across all business units, and was broadly flat for Research & Discovery. A decline of 7.8% in Service & Healthcare as we reduce the level of sales of refurbished imaging systems in the US Healthcare business, offset order growth of 3.7% in service of our own products. Total reported orders grew by 5.0% (5.8% at constant currency). Excluding orders from US Healthcare, reported and constant currency orders grew by 8.3% and 8.9% respectively.

Reported revenue of £296.9 million (2017: £300.2 million) decreased by 1.1%. Materials & Characterisation grew by 11.7%. Research & Discovery and Service & Healthcare declined by 10.5% and 3.6% respectively.

Excluding currency effects, revenue grew by 13.2% for Materials & Characterisation with growth across all constituent businesses. Lower optical microscopy sales and an increase in the proportion of customised magnetic and cryogenic systems with longer production lead times, resulted in a constant currency decline of 9.7% in Research & Discovery revenue. Growth in revenue from service of our own products was offset by an anticipated decline in US Healthcare revenue from selling fewer refurbished imaging systems, leading to a constant currency revenue decline of 2.9% in Service & Healthcare.

On a geographical basis, at constant currency, revenue grew by 4.3% in Europe, 1.2% in Asia and 8.3% for the Rest of World. Constant currency revenue declined by 5.3% in North America but was in line with last year when excluding revenue from OI Healthcare.

The order book, at constant currency, increased by 42.4% for Materials & Characterisation and 15.2% for Research & Discovery, with a decline of 10.8% in Service & Healthcare. Total reported order book grew by 5.0% (10.4% at constant currency). Excluding the order book from US Healthcare, reported and constant currency order book growth was 14.0% and 18.4% respectively.

£ million	Materials & Characterisation	Research & Discovery	Service & Healthcare	Total <sup>1</sup>
Revenue: 2016/17	105.7	125.3	69.3	300.2
Underlying movement	13.9	(12.1)	(2.0)	(0.2)
Foreign exchange	(1.5)	(1.1)	(0.5)	(3.1)
Revenue: 2017/18	118.1	112.1	66.8	296.9
Revenue growth: reported	+11.7%	(10.5%)	(3.6%)	(1.1%)
Revenue growth: constant currency	+13.2%	(9.7%)	(2.9%)	(0.1%)

1. Excluding inter-sector revenue.

#### **Gross profit**

Gross profit fell by 4.1% to £150.9 million (2017: £157.3 million), representing a gross profit margin of 50.8%, a decrease of 160 basis points over last year.

#### **Operating profit**

Adjusted operating profit increased by 22.4% to £46.5 million (2017: £38.0 million), representing an adjusted operating profit margin of 15.7%, an increase of 300 basis points against last year. Materials & Characterisation margin rose by 550 basis points to 17.0% (2017: 11.5%). Research & Discovery adjusted operating margin increased by 130 basis points to 12.3% (2017: 11.0%). Service & Healthcare margin increased by 160 basis points to 18.9% (2017: 17.3%).

Our share of the ScientaOmicron joint venture showed a profit of £0.5 million for the year, an improvement of £1.3 million against the comparative period. After restructuring costs and impairments, our share of the ScientaOmicron joint venture was a loss of £1.9 million.

Currency effects (including the impact of transactional currency hedging) have increased reported adjusted operating profit by £10.6 million when compared to blended hedged exchange rates for the comparative period. Blended hedged exchange rates for the US Dollar, Euro and Japanese Yen against Sterling are all at stronger rates than last year.

At constant currency, the adjusted operating profit margin was 12.0%, a decline of 70 basis points.

£ million	Materials & Characterisation	Research & Discovery	Service & Healthcare	Total
Adjusted operating profit: 2016/17	12.2	13.8	12.0	38.0
Underlying movement	2.4	(5.0)	0.5	(2.1)
Foreign exchange	5.5	5.0	0.1	10.6
Adjusted operating profit: 2017/18	20.1	13.8	12.6	46.5
Margin: 2016/17	11.5%	11.0%	17.3%	12.7%
Margin: 2017/18	17.0%	12.3%	18.9%	15.7%

#### Adjusting items

Amortisation of acquired intangibles of £10.9 million relates to intangible assets recognised on acquisitions, being the value of technology, customer relationships and brands.

Business reorganisation items were a net gain of £1.7 million. This comprised three main items, the first being a net gain of £3.3 million from the sale of the Superconducting Wire facility that we initially retained in New Jersey, US, following the sale of the business, and the disposal of a freehold property in Germany. Second, costs of £0.5 million were incurred within our US Healthcare business to successfully defend a legal claim relating to a prior acquisition. Lastly, we incurred restructuring costs of £1.1 million primarily relating to US Healthcare and our ScientaOmicron joint venture.

During the year our ScientaOmicron associate recognised an impairment relating to the sale of one of its subsidiaries. The Group's share of this impairment was £2.0 million.

The Group uses derivative products to hedge its short-term exposure to fluctuations in foreign exchange rates. It is Group policy to have in place at the beginning of the financial year hedging instruments to cover 80% of its forecast transactional exposure for that year. The Group has decided that the additional costs of meeting the extensive documentation requirements of IAS 39 to apply hedge accounting to these foreign exchange hedges cannot be justified. Accordingly, the Group does not use hedge accounting for these derivatives.

Net movements on marking-to-market derivatives in respect of future periods are disclosed in the Income Statement as foreign exchange and excluded from our calculation of adjusted profit before tax. The mark-to-market gain in respect of derivative financial instruments was £3.1 million (2017: £1.2 million gain). This reflects a movement from a net fair value liability to a small net asset position on currency derivatives that are hedging future transactional currency exposures for the Group compared to the previous year end. The un-crystallised balance sheet asset is attributable to a rise in the value of Sterling at the balance sheet date against a blended rate achieved on US Dollar, Euro and Japanese Yen forward contracts that will mature over the next twelve months.

#### Net finance costs

The Group's adjusted net finance costs fell by  $\pounds 2.3$  million to  $\pounds 4.2$  million (2017:  $\pounds 6.5$  million) with net finance charges falling by  $\pounds 1.8$  million to  $\pounds 3.6$  million and pension financing charges falling by  $\pounds 0.5$  million to  $\pounds 0.6$  million.

#### Profit before tax

Continuing adjusted profit before tax increased by 34.3% to £42.3 million (2017: £31.5 million), up 0.6% at constant currency. The continuing adjusted profit before tax margin increased by 370 basis points to 14.2% (2017: 10.5%).

Continuing profit before tax of £34.2 million (2017: loss of £26.2 million) is after the mark-to-market movement on derivative financial instruments, amortisation of acquired intangibles and other adjusting items.

#### Тах

The adjusted tax charge from continuing operations of £10.1 million (2017: £7.8 million) represents an effective tax rate of 23.9% (2017: 24.8%). The current tax liability includes a provision of £2.9 million in respect of a historical financing structure, of which £2.0 million was provided in this financial year. The statutory effective tax rate from continuing operations is 42.7% owing to a reduction in deferred tax assets arising from a lowering of the US tax rate.

#### Earnings per share

Continuing adjusted basic earnings per share increased by 35.7% to 56.3 pence (2017: 41.5 pence); adjusted basic earnings per share increased by 13.5% to 55.6 pence (2017: 49.0 pence). Continuing adjusted diluted earnings per share were 56.1 pence (2017: 41.4 pence); adjusted diluted earnings per share were 55.4 pence (2017: 48.9 pence).

Undiluted weighted average shares have increased by 0.1 million to 57.2 million.

#### Foreign exchange

The Group faces transactional and translational currency exposure, most notably against the US Dollar, Euro and Japanese Yen. For the full year, approximately 16% of Group revenue was denominated in Sterling, 52% in US Dollars, 19% in Euros, 11% in Japanese Yen and 2% in other currencies. Translational exposures arise on the consolidation of overseas company results into Sterling. Transactional exposures arise where the currency of sale or purchase transactions differs from the functional currency in which each company prepares its local accounts.

The Group maintains a hedging programme against its net transactional exposure using internal projections of expected currency trading transactions expected to arise over a period extending from 12 to 24 months. As at 31 March 2018 the Group had currency hedges in place extending up to twelve months forward.

For the 2018/19 financial year, we expect a currency headwind to operating profit of approximately £3 million, based on current exchange rates.

#### Dividend

The Group's policy is to increase the dividend each year in line with the increase in underlying earnings. Given the strong reduction in net debt and the positive impact from the Horizon strategy, the Board has proposed to increase the final dividend to 9.6 pence (2017:-9.3 pence). This results in a total dividend of 13.3 pence (2017: 13.0 pence). The final dividend will be paid, subject to Shareholder approval, on 19 October 2018 to Shareholders on the register as at 14 September 2018.

## Finance Review continued

#### **Cash flow**

The Group cash flow is summarised below.

	Year ended 31 March 2018	Year ended 31 March 2017
A Protocol and a second second by	fm	£m
Adjusted operating profit	46.5	38.0
Depreciation and amortisation	9.1	8.9
Adjusted EBITDA	55.6	46.9
Working capital movement	(13.2)	(4.4)
Purchase of rental assets held for subsequent sale	(0.7)	(1.0)
Loss on disposal of property, plant and equipment	0.3	0.5
Equity settled share schemes	1.1	0.5
Share of (profit)/loss from associate	(0.5)	0.8
Business reorganisation items	(1.3)	(1.9)
Pension scheme payments above charge to operating profit	(7.9)	(6.9)
Cash generated from operations	33.4	34.5
Interest	(2.1)	(5.0)
Tax	(3.8)	(2.1)
Capitalised development expenditure	(5.8)	(5.9)
Expenditure on tangible and intangible assets	(4.8)	(3.1)
Proceeds from sale of property, plant and equipment	9.3	_
Increase in investment in associate	(2.1)	_
Acquisition of subsidiaries, net of cash acquired	—	(9.8)
Proceeds from sale of subsidiary undertaking	71.2	12.2
Decrease in long-term receivables	0.9	_
Dividends paid	(7.4)	(7.4)
Proceeds from issue of share capital	0.2	_
Decrease in borrowings	(96.8)	(12.8)
Net (decrease)/increase in cash and cash equivalents from continuing operations	(7.8)	0.6

Note: Adjusted EBITDA is earnings before interest, tax, depreciation, intangible amortisation, mark-to-market of financial derivatives and other non-cash adjusting items.

#### Cash generated from operations

Cash generated from operations fell by £1.1 million to £33.4 million (2017: £34.5 million), representing 68.8% (2017: 90.3%) cash conversion. Cash conversion is defined as: cash generated from operations before business reorganisation items and pension scheme payments, less capitalised development expenditure and capital expenditure/adjusted operating profit.

The working capital outflow of £13.2 million reflects an increase in inventories of £4.5 million, an increase in receivables of £14.4 million, a decrease in payables of £2.8 million and an increase in customer deposits of £2.9 million. The increase in inventories reflects an increase in work in progress and components to support our planned production schedule in the first quarter of 2018/19 for our customised magnets

and cryogenic systems, as well as an increase in demonstration stock to support new launches of imaging and analysis products used in electron microscopy. The movement in receivables consists of an increase of £8.6 million due to good sales growth across our Materials & Characterisation sector along with a higher proportion of sales made towards the end of the year compared to the previous period. In addition, we also shipped a higher proportion of customised magnets and cryogenic systems that were invoiced but not paid at the end of the year. Furthermore, an increase of £2.3 million relates to foreign currency forward contracts relating to the previous year but settled in this financial year, and £3.5 million relating to the settlement of foreign currency swaps that are hedging overseas cash balances.

#### Interest

Net interest paid was £2.1 million (2017: £5.0 million). The difference from last year is due to lower financing costs arising from a lower level of average net debt compared to the comparative period following the receipt of proceeds from the sale of Industrial Analysis part way through the period, and the settlement of £1.0 million of interest payments made just after the year end close.

#### Тах

Tax paid was £3.8 million (2017: £2.1 million), the comparative period benefiting from tax deductions on allowable adjusting items and utilisation of brought forward tax losses.

#### Investment in Research and Development (R&D)

Total cash spend on R&D in the year was £24.8 million, equivalent to 8.4% of sales (2017: £25.8 million, 8.6% of sales). A reconciliation between the amounts charged to the Income Statement and the cash spent is given below:

	Year ended 31 March 2018 £m	Year ended 31 March 2017 £m
R&D expense charged to the Income Statement	23.4	24.3
Depreciation of R&D-related fixed assets	(0.1)	(0.1)
Amounts capitalised as fixed assets	0.1	0.2
Amortisation and impairment of R&D costs capitalised as intangibles	(4.4)	(4.5)
Amounts capitalised as intangible assets	5.8	5.9
Total cash spent on R&D during the year	24.8	25.8

During the year intangible assets of £1.8 million were impaired within our X-ray Technology business on a development project discontinued as a result of the sale of Industrial Analysis. In addition, we impaired £1.4 million in respect of a development project which has experienced delays and cost overruns.

#### Investment in associate

The Shareholders of ScientaOmicron agreed to a capital injection to strengthen the balance sheet of the joint venture and ensure future liquidity in support of the business strategy. Our share was £2.1 million and was paid in September 2017.

#### **Disposals**

The sale of Industrial Analysis was completed on 3 July 2017. A post-tax profit of £45.9 million has been recorded within discontinued operations.

#### New accounting standards

Transition to IFRS 9 Financial Instruments will take effect from 1 April 2018, with the half-year results for September 2018 being IFRS 9 compliant and the first Annual Report published in accordance with IFRS 9 being for the year ended 31 March 2019. There is no requirement to restate comparatives. The main impact is likely to be in respect of mark-to-market valuation of currency derivatives that are hedging future cash flows. The gain or loss on unrealised forward foreign exchange contracts might qualify for hedge accounting and so be booked directly to reserves with the gain or loss recycled to the Income Statement on maturity. Currently, gains or losses are treated as adjusting items. Work is ongoing to assess the extent to which the Group's hedges will qualify for hedge accounting.

The Group will also be adopting IFRS 15 Revenue from Contracts with Customers using the modified retrospective approach, which means that the cumulative impact on adoption will be recognised in retained earnings on 1 April 2018, with the half-year results for September 2018 being IFRS 15 compliant, and the first Annual Report published in accordance with IFRS 15 being for the year ended 31 March 2019. Comparatives will not be restated. We anticipate that the main differences will be within our NanoScience business where the revenue recognition on complex customised magnetic and cryogenic systems will be deferred from being primarily on transfer of legal title to completion of installation.

The Group will be adopting IFRS 16 Leases in the 2018/19 financial year. The main impact will be in respect of property and vehicle leases which are currently accounted for as operating leases. Further detail on the impact of these new accounting standards is set out in the accounting policies of the Financial Statements.

#### Net debt and funding

#### Net debt

Net debt decreased in the period from £109.3 million to £19.7 million. Cash generated from operations was £33.4 million. Disposal proceeds of £71.2 million relate to the sale of Industrial Analysis. The Group invested in capitalised development costs of £5.8 million and tangible and intangible assets of £4.8 million.

Movement in net debt £m Net debt as at 31 March 2017 109.3 Cash generated from operations (33.4)Interest 2.1 3.8 Tax Capitalised development expenditure 5.8 Capital expenditure on tangible and intangible assets 4.8 Proceeds from sale of property, plant and equipment (9.3)(71.2) Proceeds from sale of subsidiary undertaking Dividends paid 7.4 Other items 0.4 Net debt as at 31 March 2018 19.7

## Finance Review continued

#### Net debt and funding continued Funding

The Group has in place an unsecured multi-currency revolving facility agreement which is committed until February 2020. The facility has been entered into with a group of three banks and comprises a Sterling-denominated multi-currency facility of £100.0 million and a US Dollar-denominated multi-currency facility of \$37.0 million.

In the year, the Group repaid £5.0 million of its bilateral private placement note, leaving an outstanding note of £39.5 million, which matures in 2021. In September 2017, the Group repaid the balance of its amortising fixed rate loan from the European Investment Bank. The Group has uncommitted facilities of £20.6 million.

Debt covenants are net debt to EBITDA less than 3.0 times and EBITDA to interest greater than 4.0 times. As at 31 March 2018 net debt to EBITDA was at 0.3 times and EBITDA to interest was 14.3 times.

#### Pensions

The Group has defined benefit pension schemes in the UK and the US. Both have been closed to new entrants since 2001 and closed to future accrual from 2010.

At 31 March 2018, the net liability arising from our defined benefit scheme obligations was £15.3 million (31 March 2017: £25.1 million), a fall of £9.8 million. The reduction in the deficit was primarily due to the contributions paid in the period and the actuarial gains on the scheme's liabilities arising from a change in the accounting assumptions at 31 March 2018. Total scheme assets at 31 March 2018 were £289.5 million (31 March 2017: £287.9 million) while liabilities were £304.8 million (31 March 2017: £313.0 million). Prior to the year end, the trustees of the UK defined benefit scheme, in consultation with the Company, reduced its exposure to on-risk assets (a portfolio of market-focused asset classes, the majority being equities) with a corresponding increase in its liability driven investments, with the objective of steering a more stable journey to being fully funded. The pension fund's gross exposure to on-risk assets has fallen from 85% to 45%; the majority of transactions required to make this change were completed in February 2018. As a result, the level of risk inherent in the investment strategy is now significantly lower than previously, in addition to a substantial reduction in funding level volatility.

#### **Going concern**

The Group's business activities, together with the factors likely to affect its future development, performance and position, are set out in the Performance, Strategy and Operations sections. The financial position of the Group, its cash flows, liquidity position and borrowing facilities are described in this Finance Review.

The diverse nature of the Group, combined with its financial strength, provides a solid foundation for a sustainable business. The Directors have reviewed the Group's forecasts and flexed them to incorporate a number of potential scenarios relating to changes in trading performance. The Directors believe that the Group will be able to operate within its existing debt facilities. This review also considered hedging arrangements in place. The Directors believe that the Group is well placed to manage its business risks successfully.

The Financial Statements have been prepared on a going concern basis, based on the Directors' opinion, after making reasonable enquiries, that the Group has adequate resources to continue in operational existence for the foreseeable future.

#### Forward-looking statements

This document contains certain forward-looking statements. The forward-looking statements reflect the knowledge and information available to the Company during the preparation and up to the publication of this document. By their very nature, these statements depend upon circumstances and relate to events that may occur in the future, thereby involving a degree of uncertainty. Therefore, nothing in this document should be construed as a profit forecast by the Company.

#### Gavin Hill

Group Finance Director 12 June 2018

#### Specific risk 1: Technical risk

Context: The Group provides high technology equipment, systems and services to its customers.

Risk	Possible impact	Control mechanisms	Mitigation
Failure of the advanced technologies applied by the Group to produce commercially viable products.	<ul> <li>Loss of market share or negative pricing pressure resulting in lower turnover and reduced profitability.</li> <li>Additional NPI expenditure.</li> <li>Adverse impact on the Group's brand and reputation.</li> </ul>	<ul> <li>"Voice of the Customer" approach and market intimacy to direct product development activities.</li> <li>Formal NPI processes to prioritise investment and to manage R&amp;D expenditure.</li> <li>Product lifecycle management.</li> </ul>	<ul> <li>Understanding customer needs/ expectations and targeted new product development programme to maintain and strengthen product positioning.</li> <li>Stage gate process in product development to challenge commercial business case and mitigate technical risks.</li> <li>Operational practices around sales-production matching and inventory management to mitigate stock obsolescence risks.</li> </ul>

#### Specific risk 2: Routes to market

**Context:** In some instances, the Group's products are components of higher-level systems sold by OEMs, and thus the Group does not control its route to market.

Risk	Possible impact	Control mechanisms	Mitigation
<ul> <li>Consolidation by OEMs in key markets.</li> </ul>	<ul> <li>Loss of key customers/routes to market.</li> <li>New competitors.</li> <li>Reduction in sales volumes or pricing and lower profitability.</li> </ul>	<ul> <li>Customer intimacy to match product performance to customer needs.</li> <li>Positioning of Oxford Instruments brand and marketing directly to end users.</li> </ul>	<ul> <li>Product differentiation to promote advantages of Oxford Instruments equipment and solutions.</li> <li>Strategic marketing with OEMs to sell performance of the combined system.</li> <li>Broadening the OEM customer base.</li> <li>Direct marketing to end users.</li> </ul>

# Principal Risks continued

#### Specific risk 3: Economic environment

Context: Government expenditure may become constrained in key markets.

Risk	Possible impact	Control mechanisms	Mitigation
<ul> <li>Reduction in research funding in key markets such as the US, China and the EU (including the UK).</li> </ul>	Lower sales and profitability.	<ul> <li>Market intimacy and diversification strategy.</li> </ul>	<ul> <li>Increased focus on customers that are not reliant on government funding.</li> </ul>

#### Specific risk 4: Political risk

Context: The Group operates in global markets and can be required to secure export licences from governments.

Risk	Possible impact	Control mechanisms	Mitigation
<ul> <li>Changes in the geopolitical landscape or a global trade war resulting in a complete embargo on trade with specific nations or punitive tariffs.</li> </ul>	<ul> <li>Lower exports adversely affecting turnover.</li> <li>Increases to input costs and lower gross margins.</li> </ul>	<ul> <li>Contract review and protection against breach in the event that export licence is withheld.</li> </ul>	5

#### Specific risk 5: Brexit-related risks

Context: The UK will leave the EU.

Risk	Possible impact	Control mechanisms	Mitigation
<ul> <li>Lower participation in EU-funded research projects post Brexit.</li> <li>Potential short-term hiatus in UK research funding.</li> </ul>	<ul> <li>Lower sales and profitability.</li> <li>Salary inflation.</li> <li>Loss of key skills, and/or increased recruitment, and/or salary costs.</li> </ul>	<ul> <li>Customer intimacy and monitoring of funded projects.</li> <li>Strategic supply chain review.</li> <li>Product pricing reviews.</li> <li>Skills and capabilities reviews.</li> </ul>	<ul> <li>Market diversification.</li> <li>Long-term pricing agreements for key suppliers and strategic sourcing review.</li> <li>Pricing strategy.</li> </ul>
<ul> <li>Barriers to existing free movement of goods and services in the EU.</li> </ul>	Cupply chain discuption		<ul> <li>Renewal of UK work permit scheme to facilitate employment of non-UK/EU nationals.</li> </ul>
<ul> <li>Tariffs on exports to EU countries from the UK and vice versa.</li> </ul>			<ul> <li>Application for Authorised Economic Operator status to facilitate movement of goods</li> </ul>
• UK becomes less attractive to EU nationals as a place to work.			with EU 27.

#### Specific risk 6: Supply chain risk

**Context:** The Group operates a strategic make or buy policy which places reliance on key partners, notably single source suppliers, in terms of pricing and on-time delivery.

Risk	Possible impact	Control mechanisms	Mitigation
• Supply chain disruption, in	• Disruption to customers.	Procurement strategy to	Buffer stocks of key
particular for single source components, leading to production delays and potentially lost revenue.	• Lower sales and profitability.	manage stock availability.	components.
	• Higher input costs.		Where possible, dual source
	<ul> <li>Negative impact on the Group's reputation.</li> </ul>		supply is sought.

Context: A number of the Group's employees have business-critical skills.

Risk	Possible impact	Control mechanisms	Mitigation
<ul> <li>Key employees leave and effective replacements are not recruited on a timely basis.</li> </ul>	• Adverse impact on NPI.		• Succession management plans.
	Operational disruption.	and recruitment of staff with key skills.	• Technical career paths.
not recruited on a timely basis.	Lower sales and profitability.	key skills.	<ul> <li>UK work permit scheme to facilitate employment of non-UK/EU nationals in place.</li> </ul>

#### Specific risk 8: IT risk

**Context:** Elements of production, financial and other systems rely on IT availability.

Risk	Possible impact	Control mechanisms	Mitigation
Cyber attack on the Group's     IT infrastructure.	<ul> <li>Disruption to business as usual operations.</li> </ul>	<ul> <li>IT security policy and associated standards and</li> </ul>	<ul> <li>Regular review, monitoring and testing of key security measures</li> </ul>
• Spread of viruses or malware	• Loss of business-critical data.	protection systems.	to assess adequacy of protection
through "Zero-day" incidents	Financial and	Internal IT governance	against known threats.
or phishing attacks.	reputational damage.	to maintain those	Citadel approach to protect
Insider threat.		protection systems and	key data.
		our incident response.	User education.
		• Employee awareness training.	

#### Specific risk 9: Operational risk

**Context:** Business units' production facilities are typically located at a single site.

Risk	Possible impact	Control mechanisms	Mitigation
• Sustained disruption to production arising from a major incident at a site.	<ul> <li>Inability to fulfil orders in the short term, resulting in a reduction in sales and profitability.</li> <li>Additional, non-recurring overhead costs.</li> </ul>	<ul> <li>Business Continuity Plans (BCPs) exist for all manufacturing sites.</li> <li>Contractual clauses to limit financial consequences of delayed delivery.</li> </ul>	
			of liability, liquidated damages and the exclusion of consequential losses.

#### **Specific risk 10: Pensions**

**Context:** The Group's calculated pension deficit is sensitive to changes in the actuarial assumptions.

Risk	Possible impact	Control mechanisms	Mitigation
<ul> <li>The reported pension deficit is sensitive to movements in actuarial assumptions and returns on investments.</li> </ul>	<ul> <li>Increase in net debt as additional Group contributions become payable to fund the deficit.</li> <li>Increase in the annual levy paid to the Pension Protection Fund.</li> <li>Reduction in net assets.</li> </ul>	<ul> <li>Regular review of pension strategy.</li> <li>Liability hedging programme to mitigate exposure to movements in interest rates and inflation.</li> </ul>	<ul> <li>The Group has closed its defined benefit pension schemes in the UK and US to future accrual.</li> <li>The Group has a funding plan in place to reduce the pension deficit over the short to medium term.</li> </ul>

02: Governance

04: Company Information

# Principal Risks continued

#### Specific risk 11: Adverse movements in long-term foreign currency rates

**Context:** A high proportion of the Group's revenue is in foreign currencies, notably US Dollars, while the majority of the cost base is denominated in Sterling.

Risk	Possible impact	Control mechanisms	Mitigation
<ul> <li>Long-term strengthening of Sterling against key currencies such as the US Dollar, Japanese Yen and the Euro. (Short-term exposure to volatility is managed by hedging programme.)</li> </ul>	Reduced profitability.	<ul><li>Procurement "make or buy" strategy.</li><li>Review of revenue and costs by currency.</li></ul>	• Strategic procurement in US Dollars, Euros and Yen.

#### Specific risk 12: Legal/compliance risk

**Context:** The Group operates in a complex technological environment and competitors may seek to protect their position through intellectual property rights.

Risk	Possible impact	Control mechanisms	Mitigation
<ul> <li>Infringement of a third party's intellectual property.</li> </ul>	<ul><li>Potential loss of future revenue.</li><li>Future royalty payments.</li><li>Payment of damages.</li></ul>	• Formal "Freedom to Operate" assessment to identify potential IP issues during product development.	<ul> <li>Confirmation of "Freedom to Operate" during new product development stage gate process.</li> </ul>

# **Viability Statement**

Provision C.2.2 of the UK Corporate Governance Code 2016 requires that the Directors perform an assessment of the Group's viability over a period longer than the twelve months required for the going concern statement. Consistent with the previous two years, this assessment covers a three-year period. The Directors consider that three years remains an appropriate time frame for assessing the Group's longer-term viability, because the medium-term strategic financial plan (SFP) provides appropriate visibility of key areas such as product development and capital expenditure requirements over this period. This year's assessment, therefore, covers the period from 1 April 2018 to 31 March 2021 (the "Viability Assessment Period").

# Key criteria applied in the assessment

Using the same criteria as previous assessments, the Board considers that the Group's viability can reasonably be assured if it is able to obtain sufficient debt finance to meet its liabilities as they fall due. In this regard it considers that it should be possible to obtain bank finance at three times leverage (i.e. net debt to EBITDA<sup>1</sup>). It should be noted that the Group's revolving credit facility falls due for renewal in February 2020 and that at March 2018, net debt was £19.7 million. The Group plans to renew its credit facilities and the Directors consider that continuing to operate within a gearing ratio of 3:1 should enable the Group to refinance its revolving credit facilities, if necessary.

#### Methodology and sensitivities applied

The viability assessment quantifies the potential financial impact of the principal risks and uncertainties which are faced by the Group, should they materialise, to ascertain the Group's ability to withstand adverse events and continue in business. The key risks and uncertainties which are considered in the assessment are disclosed on the preceding pages 35 to 38 of the Annual Report. In addition to quantifying the potential financial impact of the adverse events, the viability assessment also applies estimates of certain mitigating actions that could be taken to offset the impact of downside risks. The starting point for the assessment is the detailed budget for 2018/19, together with the SFP for 2019/20 and 2020/21. These financial budgets and plans include profit and loss data and cash flow movements, and form the baseline to consider the Group's viability over the three-year period.

Some of the specific risks identified could have multiple financial consequences on the financial baseline used in the assessment. Further, several risks would result in similar financial consequences. As a result, the financial impact of risks having similar consequences has been aggregated and the potential impact has been quantified by reference to the following four consequences:

- 1. reduction in revenue;
- 2. increased cost of sales;
- 3. additional overhead costs; and
- 4. reduction in net profitability arising from adverse movements in exchange rates.

1. For the purpose of this viability assessment, EBITDA = Adjusted EBITDA (as defined on page 105).

04: Company Information

The potential direct financial consequences evaluated of the different risks are summarised below:

Risk ID	Description	Potential direct financial consequences						
		Lower turnover	Higher cost of sales	Higher overheads	Lower net profit			
1	Technical risk	✓		$\checkmark$				
2	Routes to market	$\checkmark$						
3	Economic environment	$\checkmark$						
4	Political risk	$\checkmark$	$\checkmark$					
5	Brexit-related risks	$\checkmark$	$\checkmark$	$\checkmark$				
6	Supply chain risk	✓	$\checkmark$	$\checkmark$				
7	People	✓		$\checkmark$				
8	IT risk	✓						
9	Operational risk	✓		$\checkmark$				
10	Pensions			$\checkmark$				
11	Adverse movements in long-term foreign currency rates				✓			
12	Legal/compliance risk	✓	$\checkmark$	✓				

The most significant risk in value terms relates to the potential impact arising from adverse movements in exchange rates (risk 11). As described on page 38, long-term adverse movements in three key currencies (US Dollar, Euro and Japanese Yen) would be detrimental to Group profitability because of the Group's predominantly Sterling cost base. The risk of short-term adverse movements in exchange rates is mitigated by the Group's hedging programme. As a result, the financial consequences of adverse movements in exchange rates is estimated in years two and three only of the Viability Assessment Period. It should be noted that in this assessment, the impact has been quantified in terms of net profitability, by reference to estimated net currency exposure. However, if this risk were to materialise, the reported impact in Sterling would be more complex – foreign currency denominated turnover, prime costs and overheads would all reduce in absolute, Sterling terms and the net impact would be unfavourable in terms of net profitability.

The impact of a reduction in sales volumes, including the consequential impact on prime costs and contribution margins was quantified as the second most significant risk in value terms. While the impact of the loss of a key customer or market in an individual business unit might be severe for the specific business unit, the risk is mitigated at a Group level by operating in diverse geographic markets and through diversification of the customer base within those markets. As a result, the potential revenue risk was modelled in aggregate, at a Group level, rather than by applying sensitivities at an individual business unit level. This approach has been taken for all of the sensitivities that have been applied.

The potential for increases to prime costs is the third most significant risk, as evaluated, by value. This sensitivity in the viability assessment quantifies the potential downside risk to prime costs that might arise from an increase to input costs as a result of new or increased tariffs or other inflationary pressures.

The final category of downside risk considered relates to possible increases in overheads. It is inherently difficult to predict the timing and quantum of the potential financial consequences arising from the risks identified. Therefore, these risks were quantified by using a fixed contingency against EBITDA and net debt for each year in the Viability Assessment Period. In total, the downside included in the assessment represents 3.2% of total overheads in the baseline model.

Over the Viability Assessment Period as a whole, the impact of the downside risks modelled resulted in a decrease to the baseline EBITDA of roughly 47%.

#### Outcome

The outcome of the assessment, by quantifying the financial impact of downside risks, and taking into account mitigating actions available to reduce the impact of those risks on net debt only, result in the Group staying within the parameters described above (i.e. the ratio of net debt to EBITDA is lower than 3:1 in each year of the Viability Assessment Period). Based on the outcome of the assessment performed, the Board has a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the next three years. This is based on the assumption that operating within the gearing parameter identified will enable the Group to obtain external funding, if required, when the current revolving credit facility falls due for renewal in February 2020.

This assessment supports not only the viability statement above, but also the statement on going concern, set out below.

#### Going concern statement

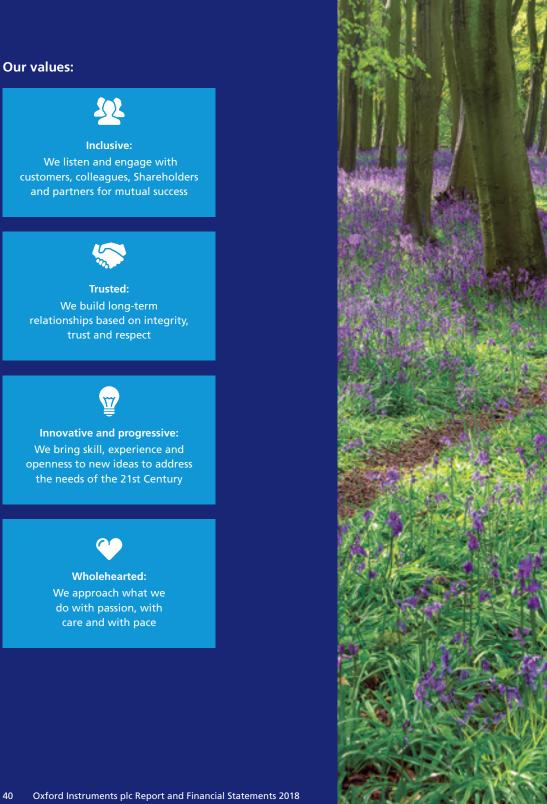
The Group's business activities and factors that are considered likely to affect its performance and position in the future are set out in the Strategic Report on pages 1 to 47. The Finance Review on pages 28 to 34 discloses information relevant to the Group's financial position, its cash flows, borrowing facilities and liquidity.

The Directors have considered the Group's current financial position and future prospects and, as set out in the viability statement above, have performed an assessment of longer-term viability up to 31 March 2021. On this basis, the Directors conclude that there is a reasonable expectation that the Group will continue in operational existence for the foreseeable future and that there are no material uncertainties that may cast significant doubt over its ability to continue as a going concern.

As a result, the Directors continue to prepare the Financial Statements under the going concern basis.

# Corporate Responsibility

Corporate responsibility is integral to our ongoing business success.



02: Governance

Our commitment to corporate responsibility is to recognise the impact we have on the world, our employees, our communities and our working environments.

# The key areas in which we focus our efforts are:

- the development, engagement and wellbeing of our employees;
- sustaining and developing an inclusive workplace;
- health and safety and environmental monitoring; and
- the ethics of how we do business, including human rights and business malpractice.

#### Oxford Instruments is committed to the following guiding principles of corporate responsibility:

- establishing and maintaining long-term, effective stakeholder relationships;
- offering our people an excellent employment experience and sense of belonging;
- strengthening our business through diversity and inclusion; and
- operating in an ethical, sustainable and environmentally responsible manner.

Our ability to enable industrial companies and scientific research communities to image, analyse and manipulate materials at the nanoscale is instrumental in the advancement of society, a role that we take seriously. We are mindful of the impact we have on the world through the resources we bring into the Company, such as our people, our supplier relationships, and the products we send out, ensuring they are safe and environmentally sound.

We are encouraged to take our corporate responsibility seriously by the fact our key enabling technologies are providing the basis for innovation across a range of markets and industrial sectors, and are helping underpin the shift to a greener economy, increased digital connectivity, advances in materials, life science, manufacturing and healthcare.

#### **Our employees**

At Oxford Instruments, our employees are fundamental to our business success. We continually invest in our people, developing the capabilities that we will need to succeed over the longer term. We are committed to being the company where the best in our sector want to work. We strive to offer the opportunities that will attract, motivate and retain talented employees, enabling them to give their best.

Our people vision is to be proud to be recognised as the leaders in what we do and for the difference we make in the world. Our aim is to retain, attract and enable the best people to perform, creating an inclusive environment and culture, where difference is valued and people are recognised for what they deliver and bring to the team.







- 1: Santa Barbara employees taking part in the Oxford Instruments running challenge.
- 2: Annual intra-company football match.
- 3: Chinese team working together in the office.

03: Financial Statements

## Corporate Responsibility continued

We have introduced a range of global initiatives to help create a sense of belonging.

# Our employees continued Our workplace

As an international organisation, our employees are located across the world, frequently based in satellite offices that are remote from the main business sites. In this context it is important that we work hard to help people feel part of a global team, and we have been upgrading many of our office spaces to enhance the Oxford Instruments experience. We have also introduced a range of global initiatives to help create a sense of belonging and ensure people feel part of a global team. Activities have included a global photo competition and a running challenge, whereby our employees were challenged to run a combined distance of 10,000 miles. This challenge also aligns with our increasing focus on the wellbeing of our employees. We are rolling out health checks across all our sites, and encouraging a good work-life balance through our additional holiday purchase scheme, which 27% of our UK employees have taken up, this is increasing each year.

This year we successfully launched Gem, our cloud-based information system. This gives employees much more control over their personal profiles, providing full visibility of the organisation, making tasks such as booking holidays or undertaking annual appraisals much easier. We have further built on the sense of being part of a global team by running a number of cross-business projects. This has allowed us to use the strengths that exist in one part of the business to support the rapid expansion of that capability in other parts of the business. Recent successes include product and software development projects.

#### **Developing capability**

We regularly undertake capability reviews, recognising the importance of ensuring we have the skills we need to help us deliver long-term sustainable growth. We have been working hard to address capability gaps across the Group by both bringing in the capabilities we need for the future, and investing in the talented people we have, reaching beyond our management capabilities. We have made a significant investment in our sales, marketing, innovation and operational excellence teams across the Group. We are undertaking Miller Heiman training for our sales teams, with 249 people participating, and have identified 60 people as operational excellence champions who are undergoing training in support of this.

We continue to underpin our capability development through the various leadership development programmes we run. Our flagship Management Development Programme, (MDP), covers many of the skills needed to be a successful manager in Oxford Instruments. We have built on this further with our Early Careers and Maximising Potential programmes that focus on introducing high potential candidates to the business and help them to succeed within the Group.

To further support our technologists and engineers to deliver innovative products and solutions that continually meet and exceed our customers' expectations, we have introduced a Technical Development Programme. This programme integrates with our technical career ladder, offering technical employees a clear career path within Oxford Instruments, without the need to take on people management roles. This enables us to attract and retain the best engineers and scientists. We offer Industrial Post-Doctoral placements to high-calibre researchers, providing them the opportunity to experience a role in industry. In many cases these individuals have decided to join us on a permanent basis, helping to ensure that our technical skill base remains at the cutting edge.

Our values are deeply ingrained in Oxford Instruments and we endeavour to embody them in all we do. We are now looking at how we can further help people understand the behaviours we need in support of the transformation we are making through our Horizon strategy. We have taken time to create the environment for change and now we are empowering our employees to make the decisions that will drive change. We want everyone to feel that they own the challenge and the solution, encouraging a sense of responsibility for solving problems and getting better results.

#### **Our local communities**

We believe the work we do and enable others to do is important, both benefiting and advancing society. To ensure this continues, we are committed to helping the generations coming up through education to choose STEM subjects, and to look at how we can support them to make the move to a career in STEM areas.



Many of our businesses have close links with schools in their area, helping bring STEM to life in the classroom, while all our UK sites also run school work experience programmes. We continue to work with a range of Centres for Doctoral Training to offer students the opportunity to build on their educational learning with practical, project-based experience and have also launched industrial postdocs, which are fixed term contracts to allow postdocs to experience working in industry.

We continue to encourage our sites to support their local communities through charity and community activities. This year, as well as regular charity coffee mornings and bake sales, we have held Christmas jumper competitions and filled nearly 100 shoe boxes with Christmas gifts for children. We are establishing further ways to support our communities, and this year a group of our employees gave up their time to help paint fences at a local Riding for the Disabled school, which was very much appreciated and made a real difference for the school.



#### Our working environment Diversity and inclusion

Our objective is to ensure that we have a high capability, diverse workforce that enables us to better understand our customers and markets; with a broad range of perspectives and experiences that maximise our capability to innovate, make the right decisions and exceed our customers' expectations. In order to retain, attract and enable the best people to perform, we need to create an inclusive environment and culture, where difference is valued and people are recognised for what they bring to the team and what they deliver.

As a result of our work in this area we have seen an increase in the number of women in high impact roles and we have more balanced shortlists. Our drive is to ensure we are encouraging the right behaviours we need for success. Our managers receive unconscious bias training through our MDP. In addition, we have enhanced our leave and flexible working schemes to attract and retain a diverse workforce. This year we published our gender pay gap report. This is available on our website at **www.oxinst.com/gender-pay-review** and was shared internally with employees ahead of external publication to ensure they were aware of it and fully understood it before it was released.

 Volunteers helping a local Riding for the Disabled school with repairs.
 Shoe boxes filled with Christmas gifts

for children in need.

#### Ethics

We have been refreshing our code of conduct, updating our policies on how we do business and what we expect of others. We have created a clearer, more helpful document for stakeholders, providing more transparency for our employees about what's expected of them. This will help give them confidence that they are taking the right actions in various situations.

## Corporate Responsibility continued

Each business has an energy champion at a local level who is responsible for monitoring energy use, waste streams, recycling and emissions to air, water and land.

# **Our working environment** continued

Human rights and modern slavery We continue to review our policies and systems supporting human rights. Our policy is guided by the United Nations Guiding Principles on Business and Human Rights. Our Human Rights Policy states our intent to be inclusive, supportive and safe, covering matters including forced labour, child labour, discrimination and the right to form or join a trade union and to bargain collectively.

We expect every employee to adhere to the spirit of our Policy and it is fully supported by our Board. All members of the Group's Executive Committee take responsibility for ensuring its implementation within their part of the Group. We also extend our expectations on human rights to those we work to: our partners, contractors and suppliers.

We are committed to preventing acts of modern slavery and human trafficking from occurring within our business and supply chain and put in place effective systems and controls in order to do so. We have reviewed, and improved, our supplier due diligence and audit procedures. We have a zero-tolerance approach to all forms of modern slavery, including servitude, forced, bonded and compulsory labour and human trafficking and we expect our suppliers to adopt the same approach.

#### Health and safety

Health and safety within Oxford Instruments has been managed for several years by Charles Holroyd, Group Business Development Director. However, going forward, Richard Pollard, Managing Director of Plasma Technology, will assume responsibility for health and safety at the Group level, assisted by the Group Health, Safety and Environment Manager Dave Wales, who is responsible for ensuring that day-to-day activities are carried out safely. All manufacturing sites are audited annually by the Group Health, Safety and Environment Manager or by members of his auditing team. The large federal offices are audited every two years and the smaller offices every three years.

Three of our largest sites are certified to ISO 14001, ISO 9001 and OHSAS 18001 management system standards. These sites are subjected to twice-yearly external auditing from their nominated certification body. During 2017/18 all the sites certified to ISO 14001 achieved certification to the new ISO 14001-2015 management system standard.

The number of accidents has remained low at 52 – 8.9% down on the previous year

# Global accident figures remain at a low level

The total number of accidents recorded worldwide during 2017/18 was reduced to 52 from 57 in 2016/17. Accidents have been reduced by 76% over the previous six years. This demonstrates our commitment to the health and safety of our employees – which we take very seriously and work hard, as a team, to effect improvements. Our sites continue to operate safely, with the majority of accidents recorded being very minor cuts and bruises. The number of accidents per employee increased slightly to 0.033 during 2017/18 from 0.030 the previous year.

Globally, three reportable accidents occurred during 2017/18, the same level 2016/17. For reporting purposes, global reportable accidents were normalised using the UK definition of over seven days' absence from work. We continue to focus on making our sites safer places to work. The seven-year picture in the graph below shows a continuing positive trend.

#### Annual accident figures

	-	-	
2017/18	52		
2016/17	57		
2015/16	74		
2014/15	71		
2013/14	109		
2012/13		162	
2011/12			217







- 1: Tubney staff taking part in a Christmas jumper charity event.
- 2: Belfast staff on a charity walk for Northern Ireland Hospice.
- 3: The team at Yatton go green with further environmental work.

# Sustainability – Protecting the environment

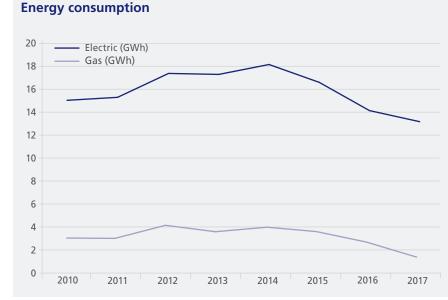
Our overall environmental priority is for our operations around the world to minimise their environmental footprint. Each business has an Energy Champion at a local level who is responsible for monitoring energy use, waste streams, recycling and emissions to air, water and land. They also continuously look for innovative ways to reduce their environmental footprint. Current initiatives include the removal of single use plastics, the installation of electric car charging points and energy reduction.

#### **Energy consumption**

We continue to monitor our global energy use and implement energy-saving techniques where they prove beneficial. During the calendar year 2017 we saw a significant reduction in the Group carbon footprint to 7,161 tonnes of carbon dioxide equivalent ( $tCO_2e$ ). This reflects continued efforts to use energy more efficiently and also business disposals. Oxford Instruments consumed 12.86 GWh of energy globally in 2017/18. The Company's measure of energy efficiency was 44.7 MWh/£million revenue compared to 58.75 MWh/£million revenue in the previous year.

#### Legal compliance – Carbon Reduction Commitment Energy Efficiency Scheme (CRC)

Oxford Instruments is a full participant in the UK Carbon Reduction Commitment Energy Efficiency Scheme (CRC). The Company purchases carbon allowances to cover its emissions from energy generation and burning gas for heating and hot water. For the 2017/18 financial year 3,211 carbon allowances were required to meet UK carbon emissions. There were 819 allowances in hand and the remaining 2,392 will be purchased in July and will be surrendered in September. The carbon allowances for 2018/19 will be purchased in advance in order to take advantage of discounted prices.



## Corporate Responsibility continued

The global carbon footprint continued to reduce – falling to 7,161 tCO<sub>2</sub>e during 2017 from 9,604 tCO<sub>2</sub>e the previous year.

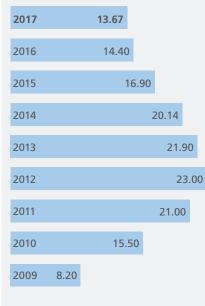
#### Waste outputs

We aim to minimise our waste outputs and ensure that as little as possible goes to landfill. Several of our sites are now "zero waste to landfill", where waste is recycled either directly e.g. cardboard, metals, wood, paper and food, or indirectly for non-recyclable general waste, which is sent to waste sites where it can be used to produce energy.

#### Air travel

Oxford Instruments measures the energy equivalent of employee air travel for its UK and US operations. Air travel for the 2017 calendar year totalled 13.67 million kilometres, a 5.3% reduction on the previous year's total of 14.4 million kilometres. This equated to a carbon footprint of 2,130 tCO<sub>2</sub>e based on 80% long haul and 20% short haul flights.

#### Air travel (million km)



#### Legal compliance – Environmental Directives

The Group complies with all environmental legislation in countries where it operates. This includes European Directives such as the following:

- Waste Electronic and Electrical Equipment (WEEE) Directive – compliance achieved by membership of B2B Compliance – an authorised compliance body.
- Restriction on use of certain Hazardous Substances (RoHS) regulations – all products that were within scope and were sold into Europe since July 2017 complied. Some of our products are outside of the RoHS scope or are covered by an exemption.
- Registration, Evaluation, Authorisation of Chemicals (REACh) Directive. All sites are working towards compliance via their supply chains.

#### **Carbon reporting**

As part of the UK Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013, Oxford Instruments has a mandatory duty to report greenhouse gas emissions as tonnes of carbon dioxide equivalent ( $tCO_2e$ ). The Company's measure of carbon emissions is tonnes of carbon dioxide equivalent ( $tCO_2e$ ) per familion of revenue. This year the global carbon emissions figure is 15.60  $tCO_2e/f$ million revenue.

#### Greenhouse gas (GHG) emissions

Oxford Instruments is a global business with operations in many parts of the world. Emissions from 17 Company sites are monitored and are reported as to the right. Some small sales offices where energy consumption is less than 0.01% of the Group's total energy consumption are omitted. The recorded use of hydro-fluorocarbons is below 5kg and has therefore been excluded. Emissions from purchased electricity, fuel for heating or process purposes (gas and oil) and fugitive emissions from process gases are reported in tonnes of carbon dioxide equivalent ( $tCO_2e$ ).



1: STEM work in California with local school children.

#### Intensity ratio

The Company's declared intensity ratio for greenhouse gas reporting is tonnes of carbon dioxide equivalent ( $tCO_2e$ ) per £million of revenue. With revenues for the year at £313.23 million and the total emissions of carbon dioxide equivalent of 4,886.9 tonnes, this gives an intensity ratio as follows:

Carbon emissions	= 15.60 tCO <sub>2</sub> e	Region	Purchased electricity (tCO <sub>2</sub> e)	Secondary fuel (tCO <sub>2</sub> e)	Fugitive emissions (tCO₂e)	Tota (tCO <sub>2</sub> e)
Revenue	£million revenue	UK	2,773.3	356.8	0	3,130.3
		North America	1,513.3	0	0	1,513.3
		Europe	76.2	6.5	0	82.7
		Asia	160.8	0	0	160.8
		Total	4,523.6	363.3	0	4,886.9

Gender	Geographical spread of employees		
Global Oxford Instruments	78%	22%	
PLC Board	86%	14%	
Management Board	86%	14%	• UK <b>58%</b>
Managers	85%	15%	
Employees	78%	22%	Americas 22%
			Europe 6%

Signed on behalf of the Board

#### lan Barkshire

Chief Executive 12 June 2018 04: Company Information

## Governance

Governance is an important element of our Board environment. To support how we do business and how we serve our stakeholders it needs to be relevant, authentic and meaningful.

We have used the key themes of the Code to articulate the Board's activities during the year:

## Leadership

See pages 49 to 54 of the Corporate Governance Report.

Effectiveness

See pages 55 to 58 of the Corporate Governance Report and Nomination Committee Report on page 59 to 60.

## Accountability

See the Audit and Risk Committee Report on pages 61 to 66, risk management disclosures on pages 66 and Financial Statements on pages 91 to 97.

## Remuneration

See the Remuneration Report on pages 67 to 80.

# Relations with Shareholders

See page 81.

# Report of the Directors

See pages 83 to 85.



# Leadership

Chairman's introduction

The Corporate Governance Statement provides an insight into how the Board operated during the year.



#### **Dear Shareholders,**

I am pleased to introduce the Group's Corporate Governance Report on behalf of the Board. The corporate governance statement provides an insight into how the Board operated during the year. The Board is committed to conducting business responsibly and maintaining high standards of corporate governance and is collectively responsible for the long-term success of the Company. This will, when underpinned by our business strategy and close attention to operations, finance and risk, enhance performance and grow the business of Oxford Instruments. The Board remains committed to driving the Group's long-term objectives, overseeing the Group's operations to ensure competent and prudent management and continuous leadership development and succession planning. The approach to governance is set by the Board and the Management Board ensures that the approach is effectively implemented across Oxford Instruments' businesses around the world.

The main Group-wide governance documents are the Oxford Instruments Code of Business Conduct and Ethics together with the policies which sit within our statement on Corporate Responsibility. These can be found on our website at www.oxinst.com/investors. The ethics programme is managed by a cross-functional team, the CBCE Forum, which works with the Group's businesses to ensure that employee communications relating to the ethics programme is delivered in a consistent and engaging manner. There is a policy portal on the Intranet which makes it easy for employees to access those policies and procedures that are relevant to them.

These policies and statements set out the values and standards that we expect our employees to meet. These documents, together with our policies, govern how we conduct our business and set the standards that drive performance. Compliance training and, in some areas, standard procedures, help to enforce this. Board oversight, reviews and audits form part of the monitoring and supervision process. Risk processes are embedded and reviewed on an ongoing basis across the organisation. During the year, we asked ICSA Board Evaluation to carry out a full evaluation of the performance of the Board. Overall, the Board achieved a "very good" result. More details on the findings of the evaluation are outlined below.

In July 2017, we were pleased to welcome Steve Blair onto our Board as Senior Independent Director. His broad operational experience in our sectors and sound technical understanding are a valuable addition to the Board.

I encourage all Shareholders to attend the AGM which will be held at the Company's Head Office in Tubney Woods, Oxfordshire on Tuesday 11 September 2018. This event provides an opportunity for Shareholders to meet the Executive and Non-Executive Directors.

#### Alan Thomson

Chairman 12 June 2018

# Leadership continued

Board of Directors



Alan Thomson (71) Non-Executive Chairman

Appointed to the Board June 2016 Appointed Chairman September 2016

#### Background

Holds a Masters degree from University of Glasgow and is qualified as a Chartered Accountant with the Institute of Chartered Accountants of Scotland.

External appointments Chairman: Hays plc

Previous experience Chairman: Bodycote plc Polypipe Group plc Senior Independent Director: Johnson Matthey plc Non-Executive Director: Laporte plc Chief Financial Officer: Smiths Group plc



Ian Barkshire (52) Chief Executive



#### Background

Holds a BSc and DPhil in physics from the University of York, is a Chartered Physicist and a Member of the Institute of Physics. Ian has worked for Oxford Instruments since 1997 in a number of senior leadership roles including NanoCharacterisation Divisional Head, Group Technical Director and Chief Operating Officer.

Gavin Hill (50) Group Finance Director

Appointed to the Board May 2016

#### Background

Holds a BA in economics and agricultural economics from the University of Exeter. He is a Chartered Accountant and an Associate Member of the Association of Corporate Treasurers.



**Stephen Blair (58)** Independent Non-Executive Director and Senior Independent Director

Appointed to the Board July 2017

Background

Holds an engineering degree from the University of Sheffield. Extensive experience in established and high-growth emerging markets, strategic planning and portfolio development.

Previous experience Senior Principal Scientist: GEC Marconi Materials Technology Research Fellow: University of York Previous experience Group Finance Director: Synergy Health plc Director, Corporate Finance: Serco Group plc

Senior finance positions: Syngenta AG and AstraZeneca plc Previous experience Chief Executive: e2v Business Group Director:

Spectris plc







Mary Waldner (48) Independent Non-Executive Director

Appointed to the Board February 2016

#### Background

Holds an MA in physics from the University of Oxford and is a Fellow of the Chartered Institute of Management Accountants. She started her career at Coopers & Lybrand Management Consultancy Services and then went on to hold senior financial positions in a number of major businesses.

External appointments Chief Financial Officer: Lloyd's Register

#### Previous experience Group Finance Director: Ultra Electronics plc Director, Group Finance:

QinetiQ plc

Thomas Geitner (63) Independent Non-Executive Director

Appointed to the Board January 2013

#### Background

A graduate of the Technische Universität München and holds an INSEAD MBA. Extensive international experience in the technology and engineering sectors, having spent over 30 years in businesses operating across the globe.

External appointments Chairman: Bibliotheca RFID Library Systems AG Switzerland

Previous experience

Executive Director: Vodafone Group Plc Henkel AG & Co. KGaA RWE AG Non-Executive Director:

BBC Worldwide Limited Constantia Flexibles GmbH Supervisory Board of Haniel & Cie GmbH Duisburg

#### Background

Professor

Independent

September 2014

Richard's research encompasses the physics, materials science and engineering of semiconductor devices made with carbon-based semiconductors. He is a Fellow of the Royal Society and of the Royal Academy of Engineering and a Foreign Member of the US National Academy of Engineering.

Sir Richard Friend (65)

Non-Executive Director

Appointed to the Board

(A)(N)(R)

#### External appointments

Cavendish Professor of Physics and a Fellow of St. John's College at the University of Cambridge Non-Executive Director: Eight19 Ltd Heliochrome Limited

#### Previous experience

Council member: The Engineering and Physical Sciences Research Council

#### Susan Johnson-Brett

Company Secretary

#### Committee membership

Secretary: Audit and Risk Nomination Remuneration

#### Background

Holds a BA from the University of Keele and has previously worked in the Secretariats of St. Modwen Properties plc, Hydro Agri (UK) Limited and TSB Group plc.

## Leadership continued

Corporate Governance Report

#### Board priorities during the year

· · · · · · · · · · · · · · · · · · ·	
Strategic	• Annual strategy day to consider progress and provide challenge on the Horizon strategy and next steps.
	Completed the disposal of the Industrial Analysis business to Hitachi High Technology and the strategic
	reorganisation of the business under the new operating segments.
	Reviewed, challenged and approved the strategic direction of the Group's medium-term plan.
Operations	Received regular operational updates through the Management Board.
	Site visits to Group manufacturing sites.
eadership and people	Completed the refresh of the Company's Board of Directors.
	• Continued the focus on organisation capability and succession planning within the senior leadership teams and more generally across the organisation.
<b>F</b> '	
Finance	Monitored progress against the 2017/18 financial plan and considered and approved the 2018/19 financial plan
	<ul> <li>Reviewed and approved the financial elements of the Group's medium-term plan.</li> </ul>
	Monitored the progress of Project Connect (the new ERP system) and the first phase of implementation.
	Approved the Annual Report, half-year results and presentations to analysts.
	Considered and approved the Group's going concern and viability statements.
	Reviewed and recommended payment of the interim and final dividends.
Governance and ethics	Appointment and induction of the new Senior Independent Director.
	• Discussed the outcome of the 2017/18 external Board evaluation and agreed opportunities for improvement.
	Reviewed feedback from institutional Shareholders.
	Meetings of the Non-Executive Directors without management being present.

#### Compliance

The Board endorses the main and supporting principles and the provisions set out in the 2016 UK Corporate Governance Code ("the Governance Code") and considers that, throughout the period under review, the Group has complied with the provisions recommended in the Governance Code save for provision A.4.1. Stephen Blair was designated as Senior Independent Director from the date of his appointment as independent Non-Executive Director on 1 July 2017.

Taken together with the reports of the Nomination Committee, Audit and Risk Committee, the Report on Remuneration and Corporate Responsibility, this Statement explains how Oxford Instruments has applied the principles of good corporate governance as set out in the Governance Code.

Resolutions for the election of all Directors will be put to Shareholders at the Company's forthcoming AGM. Once passed, this will continue to deliver a Board which meets the requirements of Provision B.1.2 of the Governance Code.

#### Preservation of value

The basis on which the Group generates and preserves value over the longer term and the strategy for delivering the objectives of the Group are to be found in the Strategic Report.

#### Board of Directors and management structure Board of Directors

The Board as at the date of this report comprises the Chairman, four Non-Executive Directors and two Executive Directors. The Directors' biographies and details of length of service are shown on pages 50 and 51. All the Directors have written letters of appointment that have been approved by the Board and which are available for inspection at the Company's Annual General Meeting.

The Chairman is responsible for leadership of the Board and ensuring its effectiveness on all aspects of its role. The division of responsibilities between the role of the Chairman and the Chief Executive has been set out in writing and agreed by the Board.

The Board is responsible to Shareholders for good corporate governance, setting the Group's strategic objectives, values and standards, and ensuring the necessary resources are in place to achieve the objectives. The Board has delegated Group responsibility for the management of health, safety and the environment to Ian Barkshire and he reports to the Board on these matters at each meeting.

#### Board members' length of service

5	
Thomas Geitner	5 years
Richard Friend	4 years
lan Barkshire	2 years
Mary Waldner	2 years
Gavin Hill	2 years
Alan Thomson	2 years
Stephen Blair	1 year

#### **Management Board**

The Board delegates management of the business to the Chief Executive. To assist in this, the Chief Executive has created a Management Board that consists of the Executive Directors, senior managers with Group-wide functional responsibilities and heads of the principal businesses of the Group's activities.

The Management Board meets monthly either physically or by video or telephone conference and focuses on Group-wide performance, strategy and risk management.

#### **Operation of the Board**

The Board is responsible to Shareholders for delivering sustainable incremental shareholder value through entrepreneurial leadership within a framework of controls for managing risk. The Board sets the Group's strategy and maintains the policy and decision-making framework in which this strategy is implemented. Further, it verifies that the necessary financial and human resources are in place to meet strategic aims, monitors performance against key financial and non-financial indicators, oversees the system of risk management and sets values and standards in governance matters.

The details of the way the Board operates, including a schedule of matters reserved to the Board for decision, are set out in the Board Reference File, which also includes the documented policies and procedures and sets out the roles and delegated authorities applying to the Directors, the Board and the Board Committees. The Board Reference File is reviewed annually as part of the annual governance review undertaken by the Chairman.

The Board retains control over strategy, investments and capital expenditure, and limits the decisions which can be taken by management in the areas of strategic and financial management and shareholder reporting. The Board also decides on the Group's capital structure, corporate actions, mergers and acquisitions, major contracts and other commitments, litigation and regulatory proceedings, remuneration and share incentive plans.

Where the Board delegates authority to management it is on a structured basis, which requires that proper management oversight exists at the appropriate level. Compliance with the delegation of authorities is monitored by the Group's internal audit function. The Board meets on a regular basis, at least seven times a year, and otherwise as required. Board meetings are held at a number of Group locations during the year. The Board also held one meeting specifically to discuss the Company's strategic direction during the year.

Board meetings involve reviews of financial and business performance against the plan approved by the Board. Risk management review, both at Group level and also for each of the Group's businesses, is embedded in the reporting system. On a rotating basis, the Board receives presentations from the businesses and key functional areas enabling it to explore specific issues in more detail. Any matter requiring a decision by the Board will be supported by a pre-circulated paper analysing all relevant aspects of the proposal and recommending a course of action.

Board papers are distributed in advance of the relevant meeting in sufficient time to allow the Directors to prepare for meetings. Minutes of Committee meetings are circulated to the relevant Directors. In the very few instances when a Director has not been able to attend Board or Committee meetings, his/her comments on the papers to be considered at the meeting are communicated in advance to the relevant Chairman.

The Non-Executive Directors meet without the Executive Directors at least annually, with the Chairman leading these meetings. The Non-Executive Directors also meet annually without the Chairman in attendance. The Senior Independent Director chairs these meetings.

The Company Secretary and the Company Secretary's office are responsible for implementing Board procedures and for advising the Board on corporate governance matters.

## Leadership continued

Corporate Governance Report

#### **Board balance and independence**

The Governance Code requires the Board to be of sufficient size that the balance of skills and experience is appropriate for the requirements of the business and that there is a balance of Executive and Non-Executive Directors such that no individual or small group of individuals can dominate the Board's decision making. The Board is committed to promoting diversity and inclusiveness of all kinds, both on the Board and throughout the Group. The Board recognises that diversity, which should be construed in its broadest sense and includes gender, religious and ethnic diversity, background and age, is an important factor in Board and, indeed, in operational effectiveness. The way in which the Board manages diversity within the Board is reported on more fully in the Nomination Committee Report on page 59 and diversity is more generally reported on page 43 in the Corporate Responsibility Report. The composition of the Board and the combination of diverse backgrounds and expertise of the Non-Executive Directors meet these principles.

Alan Thomson, Chairman, was appointed to the Board as an independent Non-Executive Director on 1 June 2016 and appointed Chairman on 13 September 2016. He has a Masters degree from Glasgow University and is a Member and past President of the Institute of Chartered Accountants of Scotland. He is Chairman of Hays plc. Previously, he was Chairman of Bodycote plc and Polypipe Group plc and a Non-Executive Director of Laporte plc, Alstom SA and of Johnson Matthey plc. Earlier in his career, he worked on a variety of audits for Arthur Andersen and Price Waterhouse, followed by senior management positions with Rockwell International plc, Raychem Ltd and Courtaulds plc and was Group Finance Director of Rugby Group plc and then Smiths Group plc.

Alan is Chairman of the Nomination Committee and a member of the Remuneration Committee.

**Steve Blair** was Chief Executive of Teledyne e2v Limited (previously e2v technologies plc), a manufacturer of sensors, radio frequency generators and semiconductors and a listed company until its acquisition by Teledyne Technologies in March 2017. Previously he was Business Group Director for Spectris plc. He has broad operational experience and a breadth of experience covering established and high-growth emerging markets, strategic planning and portfolio development.

Steve is Senior Independent Director and also a member of the Audit and Risk, Remuneration and Nomination Committees.

**Richard Friend** was appointed to the Board as an independent Non-Executive Director on 1 September 2014. Richard is a Fellow of the Royal Society and Fellow of the Royal Academy of Engineering. He is also Cavendish Professor of Physics and a Fellow of St. John's College at the University of Cambridge.

His research encompasses the physics, materials science and engineering of semiconductor devices made with carbon-based semiconductors. His research advances have shown that these materials have significant applications in LEDs, solar cells, lasers and electronics. He was knighted for services to physics in the Queen's Birthday Honours List in 2003. He has also been directly involved in the commercialisation of technology through several spin-out companies from the University of Cambridge.

Richard is a member of the Audit and Risk, Remuneration and Nomination Committees. **Thomas Geitner** was appointed to the Board as an independent Non-Executive Director on 15 January 2013. He is a graduate of the Technische Universität München and holds an INSEAD MBA.

Thomas has extensive international experience in the technology and engineering sectors, having spent more than 30 years in businesses operating across the globe. Having worked in a number of global companies he understands the importance of remuneration connecting with strategy to appropriately incentivise the executive team. The Board believes that his skills, experience and knowledge make Thomas well suited to Chairman the Remuneration Committee.

Thomas is Chairman of the Remuneration Committee and also a member of the Audit and Risk and Nomination Committees.

Mary Waldner was appointed to the Board as an independent Non-Executive Director on 4 February 2016. She is Chief Financial Officer at Lloyd's Register. She has a Masters degree in physics from Oxford University and is a Fellow of the Chartered Institute of Management Accountants.

Mary has a broad range of experience in high technology companies that operate internationally and has worked in a number of senior financial roles within major public limited companies, including as Group Finance Director of Ultra Electronics plc. The Board believes that Mary's background gives her the various insights needed to make her a well qualified Chairman of the Audit and Risk Committee.

Mary is Chairman of the Audit and Risk Committee and also a member of the Remuneration and Nomination Committees.

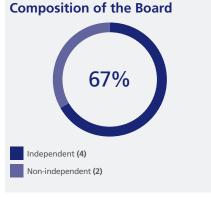
#### Independence of Non-Executive Directors

In the opinion of the Board, Alan Thomson, Stephen Blair, Richard Friend, Thomas Geitner and Mary Waldner are independent.

The Board considers that they are each independent in character and judgement and do not have relationships which are likely to affect their judgement. This opinion is based on current participation and performance on both the Board and Board Committees, including consideration of the length of service at Oxford Instruments plc.

# Term of appointment of Non-Executive Directors

Each Non-Executive Director was appointed for an initial term of three years. In line with provision B.7.1 of the Governance Code, the Board has determined that all Directors of the Board are to be subject to annual re-election by Shareholders and, accordingly, the appropriate resolutions will be put to Shareholders at the Company's forthcoming AGM.



## Effectiveness

**Corporate Governance Report** 

#### Board development and evaluation Board development

On appointment, Directors undertake an induction process which is designed to develop knowledge and understanding of the Group's businesses through visits to various Group operating sites, discussion of relevant technology, as well as product demonstrations, briefings from management and familiarisation with investor perceptions of the Group. This induction is supported by briefing papers prepared by the Company Secretary.

The operating businesses' senior management teams and functional leaders present to the Board on a regular basis. Non-Executive Directors are encouraged to meet individual members of the senior management team and have done so during the year under review.

Throughout the year, Non-Executive Directors attend Oxford Instruments' events, exhibitions and award presentations.

The Company Secretary and her office act as advisers to the Board on matters concerning governance and ensure compliance with Board procedures. All Directors have access to this advice and a procedure also exists for Directors to take independent professional advice at the Group's expense. No such advice was sought during the year. The appointment and removal of the Company Secretary are matters for the Board as a whole.

#### **Board evaluation**

In light of the provisions of Section B.6.2 of the Governance Code which expects that an externally facilitated evaluation of the Board be carried out at least triennially, ICSA Board Evaluation, which is independent of the Group, carried out a full evaluation of the performance of the Board of the Company. The evaluator, Mr Geoffrey Shepheard, met with each Director on an individual basis to obtain their views on seven aspects of the Board's performance and observed a full meeting of the Board. The evaluation included relevant questions to cover the activities of each Committee of the Board. The evaluator ensured that pre-defined constituent elements of each topic were covered in the discussions and a qualitative score was assigned by each Director.

All the results of the evaluation were then considered by the Board at a meeting attended by Mr Shepheard, where the Directors discussed the recommendations.

Overall, the conclusion of the evaluation was that the Board was performing well in all areas that were reviewed, the Committees of the Board were effective and that the Board has adopted high governance standards throughout. The evaluation confirmed that the Board, comprising a fairly new team, of whom only two had served more than two years at the start of the evaluation, is working well together and providing good challenge and support to the Executive Directors.

Board Role and Responsibilities		75
Oversight	70	
Board Meetings		78
Support for the Board		
Board Composition		
Working Together		
Outcome and Achievements	7	'3

It further concluded that the leadership shown by the Chairman, appointed in September 2016, has brought about a significant, positive change to the culture and behaviours pervading the business and that the Chairman has built a strong team, both executive and non-executive.

The Board concluded that its focus should remain on progressing the Horizon strategy, that it should continue its strong work on risk management and, now that the membership of the Board and management team has stabilised, to refresh its succession planning. Actions from the evaluation are in the process of being implemented.

In addition to the external Board evaluation, the Chairman has assessed the performance of each Board member by conducting individual interviews and has confirmed with the Nomination Committee that all Directors continue to perform effectively and demonstrate commitment to their roles. The Chief Executive, Ian Barkshire, was appraised by the Chairman and the Non-Executive Directors and the Group Finance Director, Gavin Hill, was appraised by the Chairman, Non-Executive Directors and the Chief Executive in May 2018. Led by the Senior Independent Director, Steve Blair, the Non-Executive Directors carried out an evaluation of the Chairman's performance and concluded that they were satisfied with the Chairman's commitment and performance.

80

80

80

Key:	
0-19	Poor
20-39	Average
40-54	Fair
55-70	Good
71-90	Very Good
91-100	Excellent

## Effectiveness continued

Corporate Governance Report

#### Attendance at meetings

Only the Committee Chairman and members are entitled to be present at a meeting of the Audit and Risk, Nomination or Remuneration Committees, but others may attend by invitation. No Director votes on matters where he or she has a conflict of interest. Further details of the individual Committees' activities are described below and in the Committee reports.

The following table sets out the frequency of, and attendance at, Board and principal Board Committee meetings for the year to 31 March 2018:

	Board	Audit and Risk Committee	Remuneration Committee	Nomination Committee
Number of meetings held	9	4	4	2
Alan Thomson	9	4 <sup>1</sup>	4	2
Ian Barkshire	9	4 <sup>1</sup>	3 <sup>1</sup>	2 <sup>1</sup>
Gavin Hill	9	4 <sup>1</sup>	2 <sup>1</sup>	1 <sup>1</sup>
Richard Friend	9	4	4	2
Thomas Geitner	9	4	4	2
Mary Waldner	9	4	4	2
Steve Blair <sup>2</sup>	5	3	2	1

2. Steve Blair was appointed to the Board and Committees on 1 July 2017. He has attended all Board and Committee meetings since his appointment.

#### Board Committees

1. Attended by invitation.

The Board has formed the following Committees: Audit and Risk, Nomination, Remuneration and Administration.

Membership of Board Committees, which is set out on pages 50 and 51, is determined by the Board and is reviewed regularly. The written terms of reference of the Board Committees are reviewed annually by each Committee and the Board and are available on the Company's website at **www.oxinst.com/investors** and from the Company on request. They will be on display at the Annual General Meeting.

Detail on the operation of each of the Audit and Risk, Remuneration and Nomination Committees is to be found within the relevant Committees' reports.

#### **Nomination Committee**

The Nomination Committee comprises all the Non-Executive Directors, under the chairmanship of the Chairman of the Board. The Nomination Committee is responsible for assisting the Board in the formal selection and appointment of Directors and considers succession planning for the Board. The Nomination Committee reviews succession plans annually.

#### **Remuneration Committee**

The Remuneration Committee comprises all the independent Non-Executive Directors and the Chairman of the Board. Thomas Geitner is the Chairman of the Committee. The Board considers that Thomas, with his experience of working at senior levels in global companies, including high technology companies, has an appropriate blend of skills to make a successful Chairman of the Remuneration Committee. The members of the Committee are appointed by the Board.

The Remuneration Committee is responsible for recommending to the Board the remuneration packages for Executive Directors and the bonus and share option strategy for the Group's executive management. Independent professional advice is sought when considered necessary. The Chairman and the Executive Directors are responsible for fixing the remuneration of the Non-Executive Directors and the Remuneration Committee is responsible for fixing the remuneration of the Chairman. No Director is involved in the process that sets his/her own remuneration.

The Chief Executive is invited to attend all or part of Remuneration Committee meetings as deemed appropriate, for example when consideration is being given to the performance of other Executive Directors and on significant Group-wide changes in salary structure and terms and conditions affecting other employees at senior executive level.

#### Audit and Risk Committee

The Audit and Risk Committee comprises all the independent Non-Executive Directors and its Chairman is Mary Waldner. Other members of the Board, senior management and the external auditor are invited to attend all or part of any meetings. The Board has determined that Mary, with her background in financial management, is the designated financial expert.

The Audit and Risk Committee's main responsibilities are focused on financial reporting, external audit, internal audit, internal controls and risk management.

Full details of the operation and the work of the Audit and Risk Committee are included in the Audit and Risk Committee Report set out on pages 61 to 66.

#### **Administration Committee**

The Administration Committee consists of a minimum of two Directors and deals with items of a routine and administrative nature. At each of its meetings, the Board receives a summary outlining all matters decided by the Administration Committee since the previous Board Meeting.

04: Company Information

#### Annual General Meeting (AGM)

The AGM is an opportunity for the Board to meet Shareholders. At its AGM, the Group complies with the provisions of the Governance Code relating to the disclosure of proxy votes, the separation of resolutions and the attendance of Committee Chairmen. The Group arranges for the Annual Report and Financial Statements and related papers to be posted on its website and, where Shareholders have elected to receive paper copies, posted to Shareholders so as to allow at least 20 working days for consideration prior to the AGM.

The next AGM will be held on 11 September 2018 at the Group's offices in Tubney Woods, Oxfordshire.

#### **Investor relations**

The Group places considerable importance on regular communications with its Shareholders, with whom it has an ongoing programme of dialogue. All Shareholders are encouraged to participate in the AGM, at which the Chairman and Chief Executive present an overview of the Group's business, review the results and make comments on strategy and current business activity.

The Non-Executive Directors meet informally with Shareholders both before and after the AGM and respond to Shareholder queries and requests. The Chairman and the Senior Independent Director make themselves available to meet Shareholders as required.

All Group announcements are posted on the Group website, **www.oxinst.com/investors**, as soon as they are released. The Investor Relations section of the website provides financial and other information on the Group and the website itself carries additional information on the Group's products, services and markets.

#### Risk management

Within the Group there is an ongoing embedded process for identifying, evaluating and managing the significant risks faced by the Group. Day-to-day management of this process has been delegated by the Board to the Executive Directors. Details of the process are set out in the Audit and Risk Committee Report on pages 61 to 66. This process has been in place throughout the financial year and up to the date of approval of the Annual Report and Financial Statements. It is regularly reviewed by the Board of Directors and accords with the principles of the Governance Code. The Board has carried out a robust assessment of the principal risks facing the Group, including those which threaten its business model, future performance, solvency and liquidity. Details of all major risks identified, and the mitigating actions adopted, are reported to and reviewed by the Board and the Audit and Risk Committee on a guarterly basis. The principal risks set out on pages 35 to 38 provide an overview of the major risks and uncertainties faced by the Group. All operating businesses follow a standard process for risk identification and reporting. All risks identified are assessed in terms of probability and potential impact. The resultant scores are used to classify and prioritise risks and all significant risks are reported in the Group's risk register. For those risks where mitigation actions are possible, the businesses also report on the action being taken. On a regular basis each business reviews and updates its risk register which is then reported to the Chief Executive. If a material risk changes or arises, the Managing Director of the business reports this in writing to the Chief Executive, at which time there is a discussion on the adequacy of the mitigating actions taken.

In addition, the Board and the Audit and Risk Committee consider risks to the Group's strategic objectives which are not addressed within the Group's businesses and develop appropriate actions to manage and mitigate these risks where possible.

#### Internal audit and assurance

The Group's internal audit function assesses the adequacy and effectiveness of the management of significant risk areas and provides oversight of operational management's front line and assurance activities. Further details of the scope of internal audit activities are set out in the Audit and Risk Committee Report on pages 61 to 66.

#### Internal control

The Board has accountability for reviewing and approving the adequacy and effectiveness of internal controls operated by the Group. This covers financial, operational and compliance controls and risk management. The management of each business is responsible for risk management and control within their business and, through the Management Board, implementing Board policies on risk and control. The internal control framework includes central direction, oversight and risk management of the key activities within the Group. This framework includes a financial planning process which comprises a five-year planning model and a detailed annual budget which is subject to Board approval. All Group businesses' results are reported monthly and include variance analysis to budget and the prior year. Management also prepare monthly reforecasts.

Control activities include policies and procedures for appropriate authorisation and approval of transactions, the application of financial reporting standards and reviews of significant judgements and financial performance. Financial, regulatory and operational controls, procedures and risk activities across the Group are reviewed by the Group's assurance function.

The internal control framework has been designed to manage rather than eliminate material risks to the achievement of strategic and business objectives and can provide only reasonable, and not absolute, assurance against material misstatement or loss. Because of inherent limitations, internal controls over financial reporting may not prevent or detect all misstatements. There has been no material change to the Group's internal control framework during the period covered by this Report and Financial Statements.

The key components designed to provide effective internal control within the Group include the following:

- there is a formal schedule of matters reserved to the Board for decision; other than these matters, the Board delegates to the Chief Executive and reviews the delegation of authorities throughout the management structure;
- the Group's management structure is headed up by the Management Board. Its membership comprises the Executive Directors, senior managers with Group-wide functional responsibilities and the heads of the principal businesses of the Group's activities. Day-to-day responsibility for the management of the Group is delegated to the Management Board. The responsibility is based on the identification of separate businesses for each of the Group's activities for which there are clearly defined lines of management responsibilities at all levels up to and including the Group Board and the Group's accounting and reporting functions reflect this organisation;

## Effectiveness continued

Corporate Governance Report

#### Internal control continued

- financial executives within Group businesses report to their own operational head but there is also a well-established and acknowledged functional reporting relationship through to the Group Finance Director;
- the Board reviews strategic issues and options formally once a year during the annual strategic planning process and during the year as appropriate. In addition, the Executive Directors maintain a five-year planning model of the Group and its individual businesses;
- annual budgets are prepared for each of the Group's businesses which include monthly figures for turnover, profit, capital expenditure, cash flow and borrowings. The budgets are reviewed through the Group management structure and result in a Group financial budget which is considered and approved by the Board;
- the businesses prepare monthly management accounts which compare the actual operating result with both the budget and the prior year. The businesses also prepare rolling reforecasts for orders, turnover, operating profit and cash. Both are reviewed by the Board at each of its scheduled meetings;
- the Board approves all acquisition and divestment proposals and there are established procedures for the planning, approval and monitoring of capital expenditure;
- for all major investments, the performance of at least the first twelve months against the original proposal is reviewed by the Board;
- an internal audit is carried out through a system of regular reviews of the financial and non-financial internal controls at each site. This is further reported on in the Audit and Risk Committee Report on pages 61 to 66. These reviews are coordinated by the Group Internal Audit and Risk Manager;

- the Board receives regular updates on pensions, corporate responsibility, business ethics and health and safety and the Audit and Risk Committee receives regular updates on treasury, tax, insurance and litigation;
- authorisation limits are set at appropriate levels throughout the Group; compliance with these limits is monitored by the Group Finance Director and the Group Internal Audit and Risk Manager;
- there is a detailed and risk-based delegation of authority structure in place for sales contracts and managing commercial risks. Contracts with onerous terms and conditions (such as unlimited liability contracts) require approval by either the Chief Executive or Group Finance Director; and
- with respect to the UK pension scheme, the Group nominates half of the trustee directors of the corporate trustee to the pension scheme, involves as appropriate its own independent actuary to review actuarial assumptions, agrees the investment policy with the trustee, works with the trustee on its investment sub-committee to deal with day-to-day investment matters, ensures there is an independent actuarial valuation every three years and agrees funding levels to provide adequate funding to meet the benefit payments of the members as they fall due.

#### Susan Johnson-Brett

Company Secretary 12 June 2018

## **Effectiveness**

Nomination Committee Report

The Committee's key objective is to support the Board in fulfilling its responsibilities.



#### Dear Shareholder,

I am pleased to introduce the Nomination Committee report for 2017/18. The Committee's key objective is to support the Board in fulfilling its responsibilities to ensure there is a formal, rigorous and transparent process for the appointment of new Directors to the Board and to ensure that effective succession planning processes are in place across the Group.

I took over as Chairman of the Committee and the Board in September 2016, undertook a review of the composition of the Board and determined with the Committee that the Board would benefit from the appointment of a further Non-Executive Director who could also potentially serve as Senior Independent Director. With the help of the Zygos Partnership, we undertook such a search and met with a number of interested candidates. This culminated in the appointment of Stephen Blair as Non-Executive Director and Senior Independent Director on 1 July 2017.

The Committee will continue to focus on ensuring that the present and future composition of the Board is appropriate for the delivery of the Group's strategy and to maintain, and where applicable, broaden, the range of expertise, experience and diversity of those serving on the Board. The Committee will continue to work to ensure all relevant requirements in the UK Corporate Governance Code are met.

#### Alan Thomson

Chairman of the Nomination Committee 12 June 2018

#### **The Nomination Committee**

The Nomination Committee comprises all the Non-Executive Directors, under the chairmanship of the Chairman of the Board.

The composition of the Committee is therefore compliant with the UK Corporate Governance Code 2016 ("Governance Code"). Full details of the Committee's responsibilities are set out in its terms of reference, which can be found on our website

#### at www.oxinst.com/investors-content/

advisers-and-company-secretary, and include all matters required by the Governance Code. The main responsibilities of the Committee are summarised below:

- the Committee is responsible for assisting the Board in the formal selection and appointment of Directors. It considers potential candidates and recommends appointments of new Directors to the Board;
  - there is a formal, rigorous and transparent procedure for the appointment of new Directors to the Board, the prime responsibility for which is delegated to the Committee;
  - the purpose of the Committee's selection process is to identify the most suitably qualified candidates who will complement and balance the current skills, knowledge and experience of the Board;
    - recommendations for appointments seek to strengthen the Board by selecting the best candidate based on merit and against objective criteria, including time available and the commitment that will be required of the potential Director;

- each appointment process begins with an evaluation of the balance of skills, knowledge, experience and diversity existing on the Board that is drawn up through a series of meetings between the Committee Chairman and Directors;
- the Board recognises that diversity, construed in its broadest sense and including gender, religious and ethnic diversity, age, personality and background, is an important factor in Board and operational effectiveness;
- in drawing up long and shortlists of potential candidates, the Committee considers not only relevant skills, experience and knowledge but also diversity;
- the Committee actively considers diversity before making a recommendation to appoint to the Board;
- the Committee takes external advice when considered appropriate and will only engage executive search firms who have signed up to the Voluntary Code of Conduct for Executive Search Firms on gender diversity and best practice;
- the Committee considers succession planning for the Board and the top level of senior management;
- annual performance appraisal of the Chief Executive; and
- annual review of the Committee's terms of reference.

## Effectiveness continued

Nomination Committee Report

#### Principal activities of the Committee during the year Constitution of the Board

 The Committee undertook a search for, and appointed, a Non-Executive Director who had the right experience to act as Senior Independent Director.

This comprised a number of steps.

- The Committee evaluated the balance of skills, knowledge, experience and diversity on the Board and used the output of this evaluation to identify the skills it would like introduced to the Board. The Committee, with the help of executive search consultants, the Zygos Partnership, drew up a description of the role and desired capabilities for candidates and, taking into account both diversity within, and the balance of skills on, the Board, developed a shortlist of qualifying candidates.
- Candidates met with the Chairman and Chief Executive and the proposed candidate met several Directors individually.

- Following these meetings, the Committee considered each Director's feedback and made a final recommendation to the Board on the appointment of an independent Non-Executive Director who also had the experience necessary to be an appropriately qualified Senior independent Director.
- Following successful completion of the search, on 1 July 2017 Stephen Blair was appointed to the Board as an independent Non-Executive Director and Senior Independent Director.
- All Directors of the Board are put forward for re-appointment by Shareholders each year at the AGM and this includes those appointed during the year. The Committee, taking into account the performance and value that each Director brings to the Board, has considered whether each of the Non-Executive and Executive Director appointments should be renewed for a further year and has confirmed that this is indeed the case. Accordingly, a resolution to re-appoint each Director will be put to Shareholders at the Company's forthcoming AGM.

#### **Succession planning**

- The Group HR Director and the Chief Executive presented the work that had been carried out within the business on succession planning, talent management, and leadership, including at Management Board and Executive Director level.
- The Committee discussed Board diversity and succession planning for Directors.

# Performance review of Executive Directors

- The Committee also carried out its annual review of the performance of:
  - the Chief Executive;
  - with the help of the Chief Executive, the Group Finance Director; and
  - excluding the Chairman, reviewed the performance of the Chairman.

#### Other

• Annual review of the Nomination Committee's terms of reference.

#### Attendance at meetings year ended 31 March 2018

	Nomination Committee	Date of appointment to Committee
Number of meetings held	2	
Number of meetings attended:		
Alan Thomson (Chairman)	2	1 June 2016
Stephen Blair <sup>1</sup>	1	1 July 2017
Richard Friend	2	1 September 2014
Thomas Geitner	2	15 January 2013
Mary Waldner	2	4 February 2016
Number of meetings in attendance:		
lan Barkshire	2	
Gavin Hill	1	

1. Steve Blair was appointed to the Board on 1 July 2017. He has attended all Committee meetings since his appointment.

## Accountability

Audit and Risk Committee Report

The Committee's oversight covers a range of financial and non-financial areas which are of particular importance to the long-term performance of the Group.



#### **Dear Shareholder,**

During the last financial year, the focus and composition of the Audit and Risk Committee has continued to evolve as the Group has sought to strengthen its corporate governance and management of key risk areas.

The Committee's prime areas of responsibility are the same as in the prior year. The provision of assurance relating to the financial control environment and oversight of other key functional areas including Information Technology and security, New Product Innovation and HR remain core to the Committee's role. As part of its remit, the Committee actively monitors the integrity of the Financial Statements, considers key areas of subjectivity that are material to the Group's results and assesses the application of significant financial judgements. It also considers the effectiveness of internal audit on an annual basis and has ongoing responsibility for overseeing the external audit relationship, including monitoring the provision of non-audit services as part of its review of auditor independence.

During the year the Committee has changed elements within its focus to reflect changes in the risk environment while retaining focus on core elements such as governance and control. In keeping with this approach, the internal audit function has continued to review key financial controls within the Group and has also delivered risk-based audit work. In addition, internal audit delivered a number of pieces of ad hoc work, to address specific emerging risks that were identified by the Group Finance Director and agreed with the Committee. This overall approach will continue in 2018/19 although the balance will continue to move towards specific risk areas.

In the last twelve months, the principal areas of recurring activities have included:

- review and discussion of the Group risk register at each meeting of the Committee;
- review of treasury and tax matters;
- bi-annual review of significant litigation;
- review of the Group's viability statement, including the methodology used in the forecasts and the underlying assumptions used in its preparation;
- consideration of the Group's principal areas of financial risk and associated mitigation;
- review of the effectiveness of internal audit;
- assessment of the effectiveness of the external audit process;
- review of the statement issued at the Annual General Meeting; and
- review of the Financial Statements and • any significant accounting judgements that were used in their compilation. (The significant accounting judgements relating to the 2018 Financial Statements are set out on page 64.)

In addition to its recurring activities, the Committee has focused on a number of specific risk areas that have been identified in the Group risk register over the course of the year. Key matters that have been brought to the Audit and Risk Committee for its review and discussion have included:

- the Group's management of cyber security • and associated risks;
- IT disaster recovery plans;
- leadership and succession plans;
- Brexit-related risks; and
- the methodology used for risk reporting • and how risk management is embedded in operating business units.

The remainder of this report comprises a number of sections, which include:

- the composition of the Audit and Risk Committee;
- a summary of the Committee's role and responsibilities;
- a summary of key activities by meeting over the course of the year;
- the Committee's comments on the matters that it considers to be of significance relating to the Financial Statements;
- the external audit process and auditor independence; and
- the work of internal audit and the effectiveness of internal controls and risk management.

I will be at the AGM in September. In the meantime, if you have any questions or comments I should be delighted to hear from you.

#### Mary Waldner

Audit and Risk Committee Chairman 12 June 2018

03: Financial Statements

## Accountability continued

Audit and Risk Committee Report

#### Composition

In July 2017, membership of the Committee increased to four, with Steve Blair joining the existing members of Mary Waldner, Sir Richard Friend and Thomas Geitner. Mary has acted as Chairman throughout the year.

In keeping with the FRC's Guidance on Audit Committees, the Audit and Risk Committee's terms of reference require that at least one member of the Committee has recent and relevant financial experience. Mary Waldner is the current Chief Financial Officer of Lloyd's Register and has previously held senior financial roles at a number of quoted companies. On this basis, the Board considers that Mary fulfils the requirement to have recent and relevant financial experience and is also independent. Sir Richard Friend, Steve Blair and Thomas Geitner bring sector-specific experience to the Committee.

The Committee obtains reports, information and explanations from non-members at its meetings to help it to fulfil its remit. Typically, the Committee will obtain input from members of the Board, both external and internal audit, and subject matter experts in areas such as data security, data protection, pensions, treasury and tax. At each meeting attended by the external auditor, the Committee has the opportunity to speak with the external auditor without the presence of the executive management. The Company Secretary acts as secretary to the Committee.

#### **Role and responsibilities**

Full details of the Committee's responsibilities are set out in its terms of reference, which can be found on our website at **www.oxinst.com/investorscontent/advisers-and-company-secretary**. The main responsibilities of the Committee are summarised below:

#### **Financial reporting**

- The Audit and Risk Committee undertakes a review of the Financial Statements and associated results announcements. As part of this review it advises the Board whether the Annual Report and Financial Statements, taken as a whole, are fair, balanced and understandable and provide sufficient information for Shareholders to assess the Company's performance, business model, strategy and risks.
- The review of the Financial Statements also includes a review of significant financial reporting judgements (which are considered further below), together with the accounting policies used in their compilation and compliance with accounting standards. It also considers whether all material matters such as contingent liabilities have been taken into account and treated appropriately.
- The Committee also monitors compliance with relevant statutory and listing requirements.

#### **External audit**

- The Committee maintains oversight of the relationship with the Company's external auditor.
- As part of this remit, the Committee has regular meetings with KPMG to consider key matters such as audit planning, audit risk areas and reporting.
- The Committee reviews and approves the annual audit plan, reviews audit findings and is responsible for evaluating the effectiveness of the external audit process.

- It also monitors and assesses the external auditor's independence and objectivity, is responsible for the Group's non-audit services policy and reviews the level of non-audit services provided.
- The Committee makes recommendations to the Board for the appointment or re-appointment of the external auditor.

#### Internal controls and risk management

- Monitors the adequacy and effectiveness of the internal control environment.
- Performs a review of risk management processes and the output of risk reporting.

#### Internal audit

- Annual consideration of the resources required for an effective internal audit function.
- Approval of internal audit's annual audit programme and review of financial and non-financial internal audit reports.

#### **Business malpractice**

- Reviews the adequacy and security of the Group's whistle-blowing arrangements and the provision of proportionate and independent investigation of any matters raised through those channels.
- Reviews the Group's procedures for detecting fraud and its processes and controls to prevent bribery.

#### Reporting

- Produces a report on its activities, in accordance with the UK Corporate Governance Code.
- Reports to the Board on any matter it considers requires action or improvement.
- Advises the Board on Directors' responsibilities relating to the Financial Statements.

The Committee periodically reviews its terms of reference and its effectiveness and recommends to the Board any changes required as a result of its review.

#### Activities of the Audit and Risk Committee in respect of the financial year ended 31 March 2018

The Committee has worked largely to a recurring and structured programme of activities developed from its terms of reference and designed to fulfil its responsibilities throughout the financial year. A summary of the items discussed at each meeting is set out in the table below:

Agenda item	June 2017	September 2017	November 2017	January 2018	June 2018
Review the integrity of the draft Financial Statements, appropriateness of accounting policies and going concern assumption (reports received from management and KPMG)	۰		٠		•
Review and recommend for approval the half-year and year-end announcements, interim management and AGM statements and the Report and Financial Statements	•		٠		•
Review of significant financial reporting issues and judgements	•		٠		•
Review viability statement	•				•
Assess the effectiveness of the external audit process		•			
Consider the independence and objectivity of the external auditor	٠			٠	
Review internal management representation letters	•				•
Review and agree the internal audit plan				٠	
Review the output of the internal audit work	•	•	٠	٠	•
Review the effectiveness of the Audit and Risk Committee	•				
Update on changes to accounting standards (taking effect in 2018/19)				٠	
Review of cyber security		•			
Update on litigation	٠		٠		•
Evaluate the effectiveness of the internal audit function				٠	
Review the internal control framework				٠	
Review the risk management processes				٠	
Review the Group risk register	•	•	٠	٠	•
Review of whistle-blowing arrangements				٠	
Review systems and controls for detecting fraud and the prevention of bribery and corruption				٠	
Annual review of insurance			٠		
Annual review and approval of policy relating to non-audit services				٠	
Annual review of treasury arrangements				٠	
Annual review of tax				•	

The Committee's oversight covers a range of financial and non-financial areas which are of particular importance to the long-term performance of the Group. Key non-financial elements include New Product Innovation (NPI), and support functions such as IT and HR. Cyber security, disaster recovery and data protection are areas of continued focus in IT, whilst skills and succession plans have been priorities within HR. The Committee also undertakes regular reviews of reports relating to operational, health and safety, and environmental audits. The Committee considers that focus on these areas provides appropriate assurance for the key risk areas faced.

In accordance with the 2016 UK Corporate Governance Code, the Board requested that the Committee advise it on whether the Annual Report, taken as a whole, is fair, balanced and understandable and provides the information necessary for Shareholders to assess the Group's position and performance, business model and strategy. This work formed part of the review of the draft Financial Statements that was undertaken in May and June 2018.

## Accountability continued

Audit and Risk Committee Report

# Significant matters related to the Financial Statements

The Committee reviews all significant issues concerning the Financial Statements. The principal areas of significant accounting judgement considered in relation to the 2018 Financial Statements were:

#### **Revenue recognition**

As set out in more detail in the Group's accounting policies, the application of judgement is required in determining whether risks and rewards of ownership have passed to the customer in order to establish appropriate revenue cut-off. The Group applies prescriptive rules relating to revenue recognition. The Committee has received reports relating to year-end revenue cut-off and no significant errors were reported.

# Provisions for intellectual property claims

The Group faces potential exposure to third-party claims in relation to potential intellectual property infringement. The Audit and Risk Committee obtains updates on these matters twice a year and obtains information and explanations from management on material matters. Management has presented its analysis of potential exposure to these risks and has also discussed the level of provisions recognised in the Financial Statements with the Committee and with KPMG. The Committee has verified that the methodology used to estimate potential exposure in this area has been calculated in a manner consistent with the prior year. It also recognises that the final outcome of each specific case is likely to vary from the amount provided but does not consider that adjustments to the provisions carried are required.

#### UK defined benefit pension scheme

Under the terms of IAS 19, the Group is required to value its pension deficit as the difference between the net present value of the pension scheme's assets and liabilities as at 31 March 2018.

IAS 19 also requires the Group to appoint an external actuary to give advice as to suitable assumptions and to calculate the value of the liabilities at the balance sheet date. The Group has appointed Aon Hewitt (the pension scheme's actuary) to perform bi-annual valuations on its behalf for accounting purposes.

For the year-end accounts, Aon Hewitt recommended assumptions on a consistent basis with those adopted at the previous year end. Market conditions did not move significantly during the year and as a result the actual assumptions used were largely the same as at 31 March 2017 apart from a small reduction in the inflation rate. Mortality assumptions were also updated to use the latest CMI 2017 tables. The valuation of the scheme assets was provided by PSolve (the scheme's investment manager) in accordance with market practice for valuing investment assets.

During the year, the Company and the trustee agreed to implement a pension increase exchange (PIE) option at retirement. For the purpose of preparing the IAS 19 disclosures, Aon Hewitt assumed that 30% of members would take this option. Aon Hewitt typically sees take-up rates in the range of 20%-40% in other companies which have implemented a PIE option. As a result of adopting this assumption, the reported deficit reduced by £0.9 million. In line with IAS 19, this has been credited to the Income Statement.

As set out in Note 25 to the Financial Statements, the reported deficit for the UK scheme reduced by £9.0 million to £12.5 million. This was largely due to the deficit recovery contributions of £7.1 million made by the Group. Further, the slightly lower inflation assumption and the PIE credit, as set out above, contributed to the reduction in the UK scheme's reported deficit.

#### Tax provisions

In managing its tax position, the Group had previously used certain structures which are currently subject to review by tax authorities. Until such matters are resolved, there is inherent uncertainty relating to the overall tax liability. Consequently, management is required to take a view as to whether any provisions are required to mitigate the estimated exposure. Inter alia, this requires the exercise of judgement to consider the most likely outcome and the quantum of any provisions that may be required as a result. The Committee has considered papers presented on the issues and the methodology used to evaluate provisions at 31 March 2018 and has concluded that the approach is consistent with prior years.

#### Adjusted profit and EPS

As explained in Note 1 to the Financial Statements, the Group applies adjustments to the statutory definition of profit and EPS to present adjusted profitability and earnings, as the Board believes they present a clearer picture of the financial performance of the Group. In the year ended 31 March 2018, adjustments to operating profit totalled £8.1 million. The principal adjusting item was the charge of £10.9 million relating to the amortisation of acquired intangible assets. Other adjustments to operating results include the profit of £3.3 million from the disposal of land and buildings, the mark-to-market gain of £3.1 million relating to currency hedging contracts, the Group's proportion (£2.0 million) of the impairment charge recognised by SSAB and restructuring costs of £1.6 million. The Committee has considered a paper from management setting out these adjustments. The conclusion from its review of the paper was that the Group's definitions have been consistently applied year-on-year. The nature of these adjustments requires appropriate judgement to be exercised. The Committee is satisfied with the process adopted and the disclosure in the Financial Statements.

#### Misstatements

The Committee received reports from Group management that they were not aware of any material misstatements or immaterial misstatements that had been made with the aim of achieving a specific presentation of results. The Committee also received a report from the external auditor of unadjusted audit differences. Following discussion with management and the auditor, the Committee reached the conclusion that the unadjusted differences identified by KPMG were not material to the Financial Statements and therefore no adjustment was required in the Financial Statements. Further, the Committee was satisfied that the auditor had fulfilled its duties diligently and with an appropriate level of professional scepticism.

Based on its review of management reports and information and explanations received from the auditor, the Committee concluded to its satisfaction that the critical judgements and key estimates required in preparing the Financial Statements had been appropriately addressed, both in terms of quantum and the information disclosed. The Committee was also satisfied that there had been suitable challenge to, and scrutiny of, the key assumptions adopted in determining the value of assets and liabilities reported in the Financial Statements.

#### **External auditor**

The Committee monitors the performance, objectivity and independence of the external auditor. It also recommends the appointment or re-appointment of the external auditor to the Board. It also has responsibility for the approval of audit fees.

KPMG, the external auditor, presented its audit strategy and planning memorandum to the Audit and Risk Committee at its meeting in January 2018. Its proposals covered the audit methodology, scope and planned materiality for its audit of the Financial Statements for the year ended 31 March 2018 and set out the principal areas of audit risk identified by KPMG and how it would address them. KPMG's audit strategy was informed by a number of factors including meetings with various stakeholders, such as the Chairman of the Audit and Risk Committee, the Chairman of the Board and also the Group Finance Director. Following its review, the Committee approved KPMG's audit strategy and planning memorandum.

The Committee assesses the effectiveness of the external audit process. This is informed via feedback from a number of key stakeholders within Oxford Instruments and also through reports from KPMG at both the half year and year end. The effectiveness of the process for the year ended 31 March 2018 will be evaluated by the Committee at its next meeting, scheduled for September 2018.

KPMG was re-appointed as auditor following a tender process in 2014. Under the rules for audit tendering and rotation implemented in June 2016, the Group shall be required to replace KPMG as auditor for the 31 March 2022 year end. In the meantime, the Committee shall monitor the re-appointment of KPMG on an annual basis and will arrange for a tender process when it considers it is appropriate to do so.

#### Auditor independence

In evaluating auditor independence, the Committee obtains confirmation of any relationships between the Group and KPMG that may have an impact on its independence. It also receives confirmation that KPMG is independent from the Group.

The Committee has a formal policy governing the engagement of the external auditor to provide non-audit services. This aims to further safeguard the objectivity and independence of the external auditor and to mitigate the risk of the external auditor firm's independence becoming compromised. Under the terms of this policy, all non-audit related engagements over £50,000 require formal approval by the Committee in advance. Note 4 (page 109) to the Financial Statements sets out the amount of audit fees for the year, together with fees for non-audit services. In the year ended 31 March 2018, audit fees paid to KPMG were £395.000 and non-audit fees were £39.000. This represents a non-audit to audit fee ratio of 0.1:1.

#### **Internal audit**

The Audit and Risk Committee seeks assurance over the effective design and operation of internal controls from the internal audit function. The Committee approves internal audit's annual programme which includes audits that consider the effectiveness of internal financial controls. Internal audit performs financial controls audits on a rotational basis across operational business units and the principal Federal Offices. In addition, the programme includes a number of risk-based audit topics which tend to focus on the operational business units. Over the course of the last two financial years, the financial controls audit has covered all of the Group's operational business units and Federal Offices in Germany and the United States. The plan in 2018/19 includes two further Federal Offices, including China.

In February 2018, the Group's new financial system, CSI, went live in Magnetic Resonance – the first operational business unit to adopt the new system. The 2018/19 internal audit plan includes a review of the implementation of CSI in Magnetic Resonance, focused on the underlying processes and controls.

The overall internal audit strategy is broadly consistent with the prior year and it sees a continuing evolution to a more risk-based audit programme. In 2018/19, the amount of time scheduled for risk-based elements exceeds the number of hours planned for routine financial controls reviews.

The Audit and Risk Committee approved the internal audit plan for 2018/19 at its meeting in January 2018. Amongst other things, the Committee considered whether the balance and scope of the plan was sufficient to address the audit strategy and fulfil the Committee's requirements. Relevant criteria in considering the plan included the levels of risk, other assurance activities and previous audit findings.

The Committee monitors the activities of both financial and non-financial internal audit work, to ensure that focus is directed to the most suitable areas. The direction of internal audit work considers the specific risks identified from the risk management process and also takes into account corporate governance requirements.

The Chairman of the Audit and Risk Committee and the Group Internal Audit and Risk Manager have regular meetings during the year. The latter has a direct reporting line to the Chairman of the Audit and Risk Committee and has regular dialogue with the external auditor, to discuss areas of potential risk and audit focus. All financial internal audit reports are provided to the Audit and Risk Committee and the external auditor on a timely basis once finalised, in addition to the relevant business unit/Federal Office and the Group Finance Director.

## Accountability continued

Audit and Risk Committee Report

# Risk management and internal control

The operation of an effective risk management system plays an important role in achieving strategic plans and objectives. The regular and timely identification of material risks to specific business units and the Group as a whole is a pre-requisite for risk mitigation activities. In this context, the Group risk register is a key element of risk management activities which combines the results from a bottom-up approach, at business unit level, with an assessment of Group-level risks to provide a holistic view of key risks across the Group.

During 2017/18, the Audit and Risk Committee reviewed the Group's risk register at every meeting and also reviewed the mechanism for risk reporting. Following the introduction of the new reporting segments, risks reported in the Group risk register have been grouped by segment since December 2017. In addition, the focus on longer-term, strategic risks has been strengthened by the introduction of discussions between the risk management function and business unit senior management as part of the strategic financial planning process.

The Audit and Risk Committee's evaluation of the effectiveness of the internal control environment is based on both internal assurance reports across multiple areas of activity including operations, finance, NPI and IT, and on external audit reports. The Committee reviewed the system of internal financial control on behalf of the Board and satisfied itself that the Group is meeting the required standards both for the year ended 31 March 2018 and up to the date of approval of this Report and Financial Statements. No concerns were raised with the Committee in the year about possible improprieties in matters of financial reporting.

#### Whistle-blowing

The Group's Business Malpractice Policy provides a reporting mechanism that can be used by all employees to raise a concern, covering any relevant area to the Group such as fraud, bribery and corruption, damage to the environment, criminal activity or danger to health and safety. This protected disclosure policy is communicated to all employees and provides assurances that reports made in good faith will be taken seriously, treated in confidence and that no action will be taken against the employee raising the concern. Employees can raise concerns through various reporting channels which include an independent third-party provider. The Group operates a formal process for dealing with reports which involves the Group Compliance Team and Group Human Resources Director. Third parties such as suppliers or customers can also make reports relating to the Group via the independent reporting channel.

The Business Malpractice Policy is subject to an annual review by the Committee. The Head of Internal Audit and Risk Management maintains a log of all matters reported through the independent reporting channel which documents actions arising and how they were resolved. All reports received during the year ended 31 March 2018 had been resolved at the year end. No findings from the reports were considered to be serious.

#### Summary

The Committee has concluded that, as a result of its work during the year, it has acted in accordance with its terms of reference and fulfilled its responsibilities. I will be available at the AGM to answer any questions.

#### Mary Waldner

Audit and Risk Committee Chairman 12 June 2018

# 03: Financial Statements

## Remuneration

**Remuneration Report** 

Our strategy focuses on improving the profitability of the Group to develop higher margin and growth businesses.

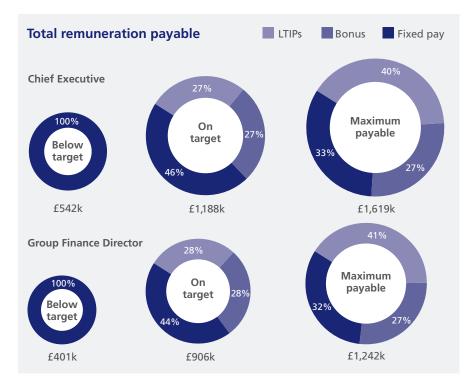


#### **Executive Directors' remuneration at a glance**

Total remuneration payable for 2017/18

Notes to these figures can be found on pages 69 and 70.

	Base			Annual			
	salary	Benefits	Pension	bonus	LTIP	Other	Total
	£'000	£'000	£'000	£'000	£'000	£'000	£'000
lan Barkshire	418	51	53	268		1	791
Gavin Hill	326	18	41	209		1	595



# Remuneration performance scenarios for 2018/19

The chart illustrates how the composition of the Chief Executive's and Group Finance Director's remuneration could vary at different levels of performance under the Company's Remuneration Policy.

## Remuneration continued

**Remuneration Report** 

#### **Dear Shareholder,**

Since the launch of Horizon, progress has been made in a number of areas in support of the new strategy. The Group has transitioned to be a more commercially focused, market-driven business. Good progress has also been made in restructuring the portfolio and in building a new management and leadership team with the specific capabilities and experience needed to accelerate Horizon. Against this background of strategic activity, the Group delivered financial performance in line with expectations.

#### Corporate performance and annual bonus payments for 2017/18

The annual bonus for 2017/18 was determined by a combination of cash, sales and profit targets, and non-financial strategic targets. As in previous years, the Committee set stretching performance targets which were clearly linked to the strategy and financial performance of the Group. Group financial performance, on which 75% of bonus was based, has been broadly in line with expectations. Organic sales were slightly above the threshold target and adjusted profit before tax slightly above on target. The cash conversion threshold was not met. In relation to the strategic targets set for 25% of the bonus, the Committee carefully reviewed performance against the objectives and scored the Chief Executive (CEO) and Group Finance Director (GFD) at 96%, noting the strong performance of the Executive Directors in driving the strategic repositioning of the Group and the outstanding operational delivery. Full details of the annual bonus outturn of 63.74% of salary (against a target level of 75% of salary) for both the CEO and GFD are set out in the Annual Report on Remuneration.

As both executives are relatively new to role, there were no Performance Share Plan (PSP) awards, with performance periods ending during the year under review.

The Committee is comfortable that there has been a robust link between reward and performance for the year under review.

#### **Review of Remuneration Policy**

Shareholders must approve our Directors' Remuneration Policy at least every three years. Our current Policy was approved in 2017 and re-approval is therefore required at our 2020 AGM.

The Remuneration Committee reviewed the current Policy in light of our business strategy and concluded that no fundamental changes are required. Accordingly, the current Policy meets the needs of the business. During the year we will consider carefully the impact of the proposed changes to the UK Corporate Governance Code and proposed new secondary legislation on our remuneration policy for executives, the policy more widely throughout the Group and the enhanced disclosure requirements.

#### Implementation of Policy for 2018/19

### **Executive Directors**

Effective from 1 July 2018, the Executive Directors' salaries will be increased by 2.5%, in line with general workforce increases. Annual bonus maximum and the PSP award level remain unchanged at 100% and 150% of salary respectively.

As explained in more detail in our Strategy section on pages 16 and 17, our strategy focuses on improving the profitability of the Group, its capital efficiency and the business portfolio to develop higher margin and growth businesses. To this end, the performance measures for the annual bonus and PSP reflect these objectives.

Small changes are being made to the weighting of the performance measures for the 2018/19 annual bonus. The measures and weightings will be profit before tax (30% of salary at target/42.5% maximum), revenue growth (15%/21.25%), cash flow (15%/21.25%) and strategic objectives (15% maximum). This represents a shift in weighting from non-financial strategic objectives (-10%) to financial objectives (+10%), recognising that whilst last year was focused on anchoring the new strategy in the business and setting the framework for future growth, the benefits of these changes are now expected to start to flow through to improved financial performance and growth.

The strategic targets will remain focused on continuing the strategic transformation to deliver long-term growth. Appropriately stretching sliding scales will be set for each financial measure, with full disclosure of targets and performance against them being made in next year's Annual Report on Remuneration. The bonus is payable fully in cash, recognising that the balance of the annual bonus and share-based PSP is weighted 60% in favour of the latter.

PSP awards will be based 50% on a ROCE target range and 50% on an earnings per share target range. EPS will ensure a continued focus on growing profitability and the continued use of ROCE, which was introduced last year, provides a close link to the business strategy over the next few years to support and incentivise management to make the changes needed to our business portfolio by ensuring that there is efficient redeployment of our capital into higher margin and growth businesses. The Committee has considered carefully the target ranges for both measures and has increased these compared to those set for last year's awards.

#### **Non-Executive Directors' fees**

Following a Board review, the Non-Executive Directors' and Chairman's fees will be increased by 2.5% from 1 July 2018. The additional fees for the role of Senior Independent Director and chairing the Remuneration and Audit and Risk Committees remain at £7,500.

#### Conclusion

I hope you will be supportive of the annual advisory vote to approve the Annual Report on Remuneration, which sets out the remuneration outcomes for the year under review and how the policy will be implemented for the year ahead. This resolution will be brought to Shareholders at our AGM to be held on 11 September 2018.

If you have any queries in the meantime, I will be pleased to engage with you either at the AGM or beforehand.

Yours sincerely

#### **Thomas Geitner**

Chairman of the Remuneration Committee 12 June 2018

# 04: Company Information

#### PART A: Directors' Remuneration Policy

This part of the Remuneration Report sets out the Group's Remuneration Policy for its Directors. The Policy was approved in a binding Shareholder vote at our AGM on 12 September 2017. The Policy took effect from that date and, unless changed with Shareholders' prior agreement, will stay in place until September 2020.

#### **Policy overview**

The Remuneration Policy promotes the delivery of the Group's strategy and seeks to align the interests of Directors and Shareholders. The Committee regularly reviews the link between its incentive structures and strategy to ensure that remuneration packages are appropriate to attract, motivate and retain the high calibre executives that are needed to deliver the Group's strategy.

The Company seeks to reward executives fairly and responsibly based on Group performance and their individual contribution. The Company has a strategy aimed at delivering significant, balanced and sustainable long-term growth and it is important for motivation and retention that the remuneration of the executives reflects this. The Committee considers carefully the motivational effects of the incentive structure in order to ensure that it is effective and does not have any unintentionally negative impact on matters such as governance, environmental or social issues. More generally, the Committee ensures that the overall Remuneration Policy does not encourage inappropriate risk taking.

# Other matters taken into consideration in determining policy

The Committee reviews the Executive Directors' packages periodically, taking account of the level of remuneration paid for comparable positions in similar companies. Comparative pay data is used carefully, recognising the potential for an upward ratchet in remuneration caused by over-reliance on such data. In determining the remuneration of the Executive Directors, the Committee also takes into account the general trends in pay and conditions across the Group as a whole. The Committee seeks to ensure that the underlying principles which form the basis for decisions on Directors' pay are consistent with those on which pay decisions for the rest of the workforce are taken. Employees are not currently consulted on executive pay. However, the Committee will keep this under review.

The Committee considers feedback from Shareholders received at each AGM, together with any feedback from additional meetings, as part of any review of Executive Director remuneration. In addition, the Committee engages proactively with Shareholders where any material changes to the remuneration policy are proposed.

#### **Remuneration Policy**

Element of pay	Purpose and link to strategy	Operation	Maximum opportunity
Base salary	<ul> <li>To provide a competitive and appropriate level of basic fixed pay to recruit and retain superior talent and avoid excessive risk taking that might otherwise result from an over-reliance on variable remuneration.</li> <li>Reflects the experience, performance and responsibilities of the individual.</li> </ul>	<ul> <li>Reviewed annually with any increase usually effective 1 July.</li> <li>Takes account of experience, performance and responsibilities as well as the performance of the Company, the complexity of the role within the Group and salary increases for employees generally.</li> <li>Set with regard to market data for comparable positions in similar companies in terms of size, internationality, business model, structure and complexity, including within the industry.</li> </ul>	<ul> <li>There is no minimum or maximum annual increase.</li> <li>Higher increases than the average percentage for the workforce may be appropriate, for example, where an individual changes role, where the complexity of the Group changes, where an individual is materially below market comparators or is appointed on a below market salary with the expectation that his/her salary will increase with experience and performance.</li> </ul>
Benefits	<ul> <li>Provided on a market-competitive basis, aids retention and follows reward structure for all employees.</li> </ul>	<ul> <li>Currently include, but are not limited to, the cost of:</li> <li>life assurance;</li> <li>private medical insurance;</li> <li>company car benefit (car, driver, car allowance); and/or</li> <li>overnight hotel accommodation where necessary to enable the executive to carry out his duties efficiently at the Head Office and other Company sites.</li> </ul>	• The value of benefits varies from year to year depending on the cost to the Company and is not subject to a specific cap. Benefit costs are monitored and controlled and represent a small element of total remuneration costs.
		<ul> <li>The benefits provided may be subject to amendment from time to time by the Committee within this Policy.</li> <li>Relocation costs and other incidental expenses may be provided as necessary and reasonable.</li> <li>Benefits are not part of pensionable earnings.</li> </ul>	
Pension	• To provide a market-competitive benefit for retirement.	<ul> <li>Company contributions to a money purchase pension scheme; or</li> <li>Salary supplement where HMRC annual or lifetime allowances are exceeded.</li> </ul>	• 14% of base salary.
Annual bonus	• Drives and rewards the successful achievement of annual targets set at the start of the year.	<ul> <li>Performance targets based on the key performance indicators and strategic objectives of the business.</li> <li>At least 70% of the bonus is based on financial metrics and the balance on non-financial strategic metrics.</li> <li>Clawback provisions apply for misstatement, error or misconduct.</li> </ul>	<ul> <li>75% of salary at year end payable at target performance.</li> <li>100% of salary at year end payable for maximum performance.</li> <li>Bonuses start to be earned from 0% of salary for achieving threshold performance</li> </ul>

## Remuneration continued

**Remuneration Report** 

#### **Remuneration Policy** continued

Element of pay	Purpose and link to strategy	Operation	Maximum opportunity
Long-term incentives	<ul> <li>To incentivise the executives and reward them for meeting stretching targets in the long term which accrue substantial value to and align the Directors'</li> </ul>	<ul> <li>Annual awards under the 2014 Performance Share Plan of performance shares (or nil-cost options) with vesting subject to achievement of performance targets. Both the vesting and performance period will be over a minimum of three years.</li> </ul>	<ul> <li>The maximum normal award limit is 150% of salary. This limit may be exceeded in exceptional circumstances e.g. recruitment, up to the limit in the PSP rules of 250% of base salary.</li> </ul>
	<ul> <li>interests with Shareholders'.</li> <li>Facilitates share ownership to provide further alignment with Shareholders.</li> </ul>	<ul> <li>The Committee will set targets each year based on long-term financial performance and/or a stock market based metric.</li> <li>25% of the awards will vest at threshold performance</li> </ul>	<ul> <li>Dividend equivalents may accrue on the PSP awards over the vesting period and for awards granted from 2018 to the end of the post vesting holding period and be paid out either as cash or as shares on vesting or at the end of the holding period as appropriate and in respect of the number of shares that have vested.</li> </ul>
		<ul><li>under each performance condition.</li><li>Clawback may be applied for misstatement, error or misconduct.</li></ul>	
		• For PSP awards granted from 2017/18, vested awards must be held for a further two years before sale of the shares (other than to pay tax).	
All-employee share schemes	To encourage employee share participation.	<ul> <li>The Company may from time to time operate tax-approved share schemes (such as the HMRC-approved Share Incentive Plan (SIP)) for which Executive Directors could be eligible.</li> </ul>	The schemes are subject to the limits set by tax authorities.
		<ul> <li>The SIP is open to all UK permanent staff employed for at least six months.</li> </ul>	
Shareholding guideline	To further align Executive Directors' interests with Shareholders'.	<ul> <li>The Committee has established shareholding guidelines which encourage the Executive Directors to build and retain a holding of Company shares equivalent to 150% of base salary.</li> </ul>	• Not applicable.
		• Until the guideline is met in full, Executive Directors are expected to retain or acquire shares equivalent to the value of 50% of the net amount realised from exercise/ vesting of share awards as appropriate after allowing for tax payable.	
Non-Executive Director fees	To remunerate the Chairman and Non-Executive Directors.	Reviewed annually.	• There is no prescribed maximum or maximum annual increase.
		• Determined and reviewed taking into account time commitment, experience, knowledge and responsibilities of the role as well as market data for similar roles in other companies of a similar size and/or business to Oxford Instruments.	
		<ul> <li>Out-of-pocket expenses including travel may be reimbursed by the Company in accordance with the Company's expenses policy including tax thereon "grossed up" as appropriate.</li> </ul>	

#### Differences in the Remuneration Policy of the Executive Directors and the general employees

There are no material differences in the structure of remuneration arrangements for the Executive Directors and senior management population, aside from quantum and participation levels in incentive schemes, which reflect the fact that a greater emphasis is placed on performance-related pay for Executive Directors and the most senior individuals in the management team. Outside the senior management team, the Company aims to provide remuneration structures for employees which reflect market norms.

#### Choice of performance measures and approach to setting targets

The Committee selects financial and strategic measures for the annual bonus that are key performance indicators for the business over the short term. For the long-term incentives, the Committee will select a combination of measures that provide a good focus on the outcomes of the Company strategy together with sustainable improvements in long-term profitability.

The Committee sets appropriate and demanding targets for variable pay in the context of the Company's trading environment and strategic objectives. The targets for the annual bonus plan will be set each year with reference to the Company's budget and business and strategic plan. The Committee will review the performance conditions and targets for awards under the PSP each year prior to awards being made, taking account of the Company's internal financial planning, market forecasts and the business environment.

# Discretions retained by the Committee in operating its incentive plans

The Committee may adjust the formula-driven outturn for an annual bonus or PSP performance condition in the event that the Committee considers that the quantum would be inappropriate in light of wider Company performance or overall shareholder experience. Any such use of discretion would be detailed in the Annual Report on Remuneration in Part B.

The Committee operates the Group's various incentive plans according to their respective rules and in accordance with HMRC rules where relevant. To ensure the efficient administration of these plans, the Committee may apply certain operational discretions. These include the following:

- select the participants in the plans; .
- determine the timing of grants and/or payments; •
- determine the quantum of grants and/or payments;
- determine the extent of vesting based on the assessment of performance; •
- determine "good leaver" status and, where relevant, the extent of vesting in the case of the share-based plans;
- where relevant, determine the extent of vesting in the case of share-based plans in the event of a change of control; •
- making the appropriate adjustments required in certain circumstances (e.g. rights issues, corporate restructuring events, variation of capital and special dividends); and
- the annual review of weighting of performance measures, and setting targets for annual bonus plan and discretionary share plans from year to year.

The Committee may adjust the targets and/or set different measures and alter weightings for existing annual bonus plan and share-based awards only if an event occurs which causes the Committee to reasonably consider that the performance conditions would not without alteration achieve its original purpose and the varied conditions are no less difficult to satisfy than the original conditions. Any changes, and the rationale for those changes, will be set out clearly in the Annual Report on Remuneration in respect of the year in which they are made.

### Legacy arrangements

In approving this Directors' Remuneration Policy, authority is given to the Company to honour any commitments entered into with current or former Directors (such as the payment of a pension or the vesting or exercise of past share awards) that have been disclosed to and approved by Shareholders in previous remuneration reports. Details of any payments to former Directors will be set out in the Annual Report on Remuneration as they arise.

### **Remuneration scenarios for Executive Directors**

The charts below show the level of remuneration potentially payable to Executive Directors under different performance scenarios for the financial year 2018/19 (see notes for assumptions):

### Remuneration scenarios



Assumptions for charts above

1. Fixed pay comprises salary levels as at 1 July 2018, pension contribution of 14% and the value of benefits received in 2017/18.

2. The on-target level of bonus is 75% of the maximum opportunity, i.e. 75% of salary.

3. The on-target level of vesting under the annual PSP is taken to be 50% of the face value of the award at grant, i.e. 75% of salary.

The maximum level of bonus and vesting under the PSP is 100% of the bonus opportunity and 100% of the face value of the PSP award at grant, i.e. 100% and 150% of salary respectively.

5. No share price appreciation has been assumed for the PSP awards and for simplicity SIP awards, as well as dividend equivalents, are excluded.

# Remuneration continued

**Remuneration Report** 

### **Recruitment and promotion policy for Executive Directors**

In setting total remuneration levels and in considering quantum for each element of the package for a new Executive Director, the Committee takes into account the skills and experience of the individual, the market rate for a candidate of that experience and the importance of securing the relevant individual.

The Company seeks to align the remuneration package with the Remuneration Policy approved by Shareholders, including the maximum plan limit for the long-term incentives and an annual bonus entitlement in line with that of the other Executive Directors. Salary is provided at such a level as required to secure the most appropriate candidate. For new appointments base salary and total remuneration may be set initially at below normal market rates on the basis that it may be increased once expertise and performance has been proven and sustained.

Specific variable remuneration performance targets can be introduced for an individual where necessary for the first year of appointment if it is appropriate to do so to reflect the individual's responsibilities and the point in the year in which he or she joined the Board.

Flexibility is retained to offer additional cash and/or share-based payments on appointment in respect of deferred remuneration or benefit arrangements forfeited on leaving a previous employer. The Committee would look to replicate the arrangements being forfeited as closely as possible and, in doing so, will take account of relevant factors including the nature of the deferred remuneration, performance conditions, attributed expected value and the time over which they would have vested or been paid. Such awards may be made under the terms of the PSP or as permitted under the Listing Rules.

For an internal appointment, any variable pay element awarded in respect of the prior role may be allowed to pay out according to its terms, adjusted as relevant to take into account the appointment. In addition, any other ongoing remuneration obligations existing prior to appointment may continue.

For external and internal appointments, the Committee may agree that the Company will meet certain relocation, legal and any other incidental expenses as appropriate.

### **Executive Directors' service contracts and policy on cessation**

Details of the service contracts of the Executive Directors, available for inspection at the Company's registered office and at the Company's AGM, are as follows:

	Contract date	Unexpired term of contract
lan Barkshire	11 May 2016	Rolling contract
Gavin Hill	9 February 2016	Rolling contract

Details of contractual terms and the policy on cessation of employment are summarised in the table below.

Contractual provision	Detailed terms
Notice period	Twelve months by the Company or by the Director.
Termination payment	A Director's service contract may be terminated without notice and without any further payment or compensation, except for sums accrued up to the date of termination, in the event of gross misconduct.
	For termination in other circumstances, the Company has a right to pay salary in lieu of the notice period (or part thereof) if it so determines.
	In addition, any statutory entitlements in connection with the termination would be paid as necessary, and at the Committee's discretion if deemed necessary, and appropriate outplacement, legal fees and settlement of claims or potential compensation claims.
Remuneration entitlements	Pro-rata bonus may also become payable for the period of active service along with vesting for outstanding share awards (in certain circumstances – see below).
Change of control	No Executive Director's contract contains additional provisions in respect of a change of control.

Any share-based entitlements granted to an Executive Director under the Company's share plans will be determined based on the relevant plan rules. The default treatment for existing awards is that any unvested awards lapse on cessation of employment. However, in certain prescribed circumstances, such as death, injury, ill health, disability, retirement or other circumstances at the discretion of the Committee, "good leaver" status may be applied. For good leavers, under the ESOS awards will vest at cessation to the extent the performance condition is satisfied, but with the Committee having discretion to vest on the normal vesting date if appropriate and to waive the performance conditions at that time and be scaled back to reflect the proportion of the performance period actually served. The Committee has discretion in exceptional circumstances to disapply time pro-rating and/or to measure performance to and vest awards at the date of cessation. Vesting at cessation would be the default position where a participant dies.

In the event of a takeover, awards vest to the extent the performance condition is satisfied and are scaled back to reflect the actual period of service, with the Committee having the discretion, acting fairly and reasonably, not to scale back.

### **External appointments**

The Board encourages Executive Directors to accept appropriate external Non-Executive appointments provided the aggregate commitment is compatible with their duties as Executive Directors. The Executive Director concerned may retain fees paid for these services, which will be subject to approval by the Board. Currently, Executive Directors do not hold any outside directorships.

# **Non-Executive Directors**

For the appointment of a new Chairman or Non-Executive Director, the fee arrangement would be in accordance with the approved remuneration policy in place at the time.

Non-Executive Directors do not have service contracts but are appointed under letters of appointment for an initial period of three years with subsequent reviews. Non-Executive Director appointments are now renewed for periods of one year, terminating at the next AGM. Their appointment can be terminated without notice and with no compensation payable on termination, other than accrued fees and expenses.

	Date of last appointment	Notice period
Alan Thomson	5 May 2016	Six months
Richard Friend	1 September 2014	None
Thomas Geitner	13 March 2017	None
Mary Waldner	4 February 2016	None
Steve Blair	1 July 2017	None

# **PART B: Annual Report on Remuneration**

The financial information in this part of the report has been audited where indicated.

# Attendance at meetings year ended 31 March 2018

	Remuneration Committee	Date of appointment to Committee
Number of meetings held	4	
Number of meetings attended:		
Thomas Geitner, Chairman	4	15 January 2013
Steve Blair <sup>1</sup>	2	1 July 2017
Richard Friend	4	1 September 2014
Alan Thomson	4	1 June 2016
Mary Waldner	4	4 February 2016

1. Steve Blair has attended all meetings since his appointment to the Committee.

# The Remuneration Committee (unaudited)

The Remuneration Committee (the "Committee") is responsible for recommending to the Board the remuneration packages for Executive Directors and has oversight of the bonus and share incentive strategy for the Group's executive management. The Chairman and the Executive Directors are responsible for determining the remuneration of the Non-Executive Directors, and the Remuneration Committee, with the exception of the Chairman, is responsible for determining the remuneration of the Chairman.

The role of the Committee includes:

- considering and determining the Remuneration Policy for the Executive Directors;
- within this agreed policy, considering and determining the various elements and total remuneration packages of each Executive Director of the Company;
- approving the design and performance targets for all performance-related plans for executives as well as the overall total payments made under such plans;
- reviewing and noting remuneration trends across the Group and considering these in terms of the Executive Directors' remuneration; and
- determining the policy for pension arrangements, service agreements, recruitment terms and termination payments to Executive Directors.

The members of the Committee are appointed by the Board and currently comprise all the independent Non-Executive Directors: Thomas Geitner, Steve Blair, Richard Friend, Mary Waldner; and the Chairman of the Board, Alan Thomson. Thomas Geitner is the Chairman of the Committee. All members served throughout the year except for Steve Blair, who joined the Board and the Committee on 1 July 2017.

The Chief Executive, the Group HR Director and other executives are invited to attend Committee meetings as deemed appropriate. For example, the Chief Executive is able to make a significant contribution when considering the performance of other Executive Directors and to discuss the wider Group remuneration policy and structure and terms and conditions affecting employees. However, no Executive Director is present when the Committee is determining his or her remuneration.

The Committee acts within its agreed written terms of reference (which are published on the Company's website: **www.oxinst.com/investors**) and complied with the provisions of the 2016 UK Corporate Governance Code regarding remuneration.

The performance of the Committee is reviewed at least once a year as part of the Board evaluation process.

During the year the Committee fulfilled its duties, as laid down in the Committee's terms of reference.

Korn Ferry Hay Group (KFHG) was the Committee's independent remuneration consultant during the year and continues with this appointment in 2018/19. KFHG is appointed by the Committee to provide advice on all aspects of executive remuneration as required by the Committee. KFGH provides no other services to the Company.

# Remuneration continued

**Remuneration Report** 

# The Remuneration Committee (unaudited) continued

KFHG is a signatory to the Remuneration Consultants' Code of Conduct and has confirmed to the Committee that it adheres to the Code. During the year, KFHG met with the Committee Chairman to discuss remuneration matters which are of particular relevance to the Company and how best it can work with the Committee to meet the Company's needs.

Fees are charged predominately on a "time-spent" basis. The total fees paid for the advice provided to the Committee during the year to KFHG were £47,261.

### **Directors' remuneration (audited)**

The remuneration paid to the Directors during the year under review and the previous year is summarised in the tables below:

						Long-term		
		Salary			Annual	incentive		
		and fees	Benefits <sup>2</sup>	Pension <sup>3</sup>	bonus <sup>4</sup>	awards <sup>5</sup>	Other <sup>6</sup>	Total
Executive		£'000	£'000	£'000	£'000	£'000	£'000	£'000
lan Barkshire	2018	418	51	53	268	—	1	791
	2017	398	20	49	231	_	_	698
Gavin Hill <sup>1</sup>	2018	326	18	41	209	—	1	595
	2017	287	15	37	182	_	_	521
Total	2018	744	69	94	477	—	2	1,386
	2017	685	35	86	413	—	—	1,219

1. Gavin Hill was appointed to the Board as an Executive Director on 9 May 2016.

 "Benefits" comprise provision of a car or car allowance, health insurance, life assurance, overnight hotel accommodation where necessary to carry out duties at the Head Office of the Company and, from August 2017 for Ian Barkshire, provision of a driver to allow him to make best use of his commuting time. Provision of a driver accounted for £29,667 of the total benefits for Ian Barkshire.

3. Contractually, each Executive Director is entitled to receive a contribution to a money purchase pension scheme worth 14% of salary. Where the contractual pension contribution exceeds the annual allowance, any balancing payment is made by the Company as a cash allowance which is paid net of employer's national insurance contributions.

"Annual bonus" represents the full annual bonus, payable in cash, payable for the year to 31 March 2018 and paid in July 2018 payroll.
 "I ong-term incentive awards" are those awards where the vesting is determined by performance periods ending in the year under report. No awards vested as a rest

5. "Long-term incentive awards" are those awards where the vesting is determined by performance periods ending in the year under report. No awards vested as a result of performance periods ending in the year reported.

6. The Company operates a Share Incentive Plan (SIP) which is open to all UK permanent staff employed for at least six months. "Other" includes the value of matching SIP shares attributable to the year. In 2017/18 Ian Barkshire and Gavin Hill participated in the SIP up to the maximum extent permitted by HMRC. The Company offers a 1:5 match for partnership shares purchased by employees and this amounted to £360 each of matching shares purchased for Ian Barkshire and Gavin Hill.

Non-Executive		Fees £'000	Benefits £'000	Pension £'000	Annual bonus £'000	Long-term incentive awards £'000	Total £'000
Alan Thomson <sup>1</sup>	2018	168	—	—	—	—	168
	2017	104	_	_	_	_	104
Steve Blair <sup>2</sup>	2018	41	_	_	_	_	41
	2017	_	_	_	_	_	_
Richard Friend	2018	47	_	—	_	—	47
	2017	44	_	_	_	_	44
Thomas Geitner	2018	54	_	_	_	_	54
	2017	52	_	_	_	_	52
Mary Waldner	2018	54	_	_	_	_	54
	2017	50	_	_	_	_	50
Total	2018	364	_	_	_		364
	2017	250		_		_	250

1. Alan Thomson was appointed Non-Executive Director on 1 June 2016 and Chairman of the Board on 13 September 2016.

2. Steve Blair was appointed Non-Executive Director and Senior Independent Director on 1 July 2017.

### **External appointments (unaudited)**

The Board encourages Executive Directors to accept appropriate external commercial non-executive appointments provided the aggregate commitment is compatible with their duties as Executive Directors. The Executive Director concerned may retain fees paid for these services, which will be subject to approval by the Board. There were no such appointments during the year.

02: Governance

# Details of annual bonus earned in year (audited)

Since the launch of Horizon, progress has been made in a number of areas in support of the new strategy. The Group has transitioned to be a more commercially focused, market-driven business. Good progress has also been made in restructuring the portfolio and in building a new management and leadership team with the specific capabilities and experience needed to accelerate Horizon. Against this background of strategic activity, the Group delivered a stable performance in line with expectations.

As in previous years, the Committee set stretching performance targets for the annual bonus which are clearly linked to the strategy and financial performance of the Group. Reported revenue was slightly above threshold performance of the organic sales metric and paid out 3.4% of the maximum payable. Cash performance did not meet the threshold for payment. Adjusted PBT was £1 million above the "on-target" performance target and paid out 87.6% of the maximum payable for this element. An adjustment was made to the organic sales targets to take account of the disposal of the Industrial Analysis business.

	Percent	Percentage of salary payable			Targets			
Measure	Threshold CEO/GFD	On target CEO/GFD	Maximum CEO/GFD	Threshold £m	On target £m	Maximum £m	Actual £m	Payout % of maximum
Adjusted PBT	0%	33.75%	45%	37.2	41.3	43.3	42.3	87.6%
Organic sales	0%	7.5%	10%	296.7	301.2	305.6	296.9	3.4%
Cash conversion	0%	15%	20%	75%	80%	85%	68.5%	0%
Strategic objectives	0%		25%	_		_	See page 76	96%

The organic sales for 2017/18 are lower than those set for the year 2016/17 to take account of the financial impact of the disposal of the Industrial Analysis business in July 2017. The target ranges set were considered to be equally challenging to those set in previous years taking into account the changes to the business.

The non-financial strategic objectives were set at the start of the year. Performance against them is set out below. The Committee in its review noted the exceptional performance in achieving the Horizon strategic objectives, laying the foundations for future growth and agreed that, when taking into account all the circumstances, a bonus of 24% out of the total 25% of salary available was appropriate.

CEO objectives and weighting	Weighting	Achievements towards objectives/performance
Develop Horizon strategy to define areas of	40%	Horizon strategy developed and approved by the Board.
margin improvement and sustainable growth.		<ul> <li>Strategic financial plan with growth and margin improvement opportunities clearly defined and actions taken to implement approved by Board.</li> </ul>
		40 out of 40
Build and develop critical people capabilities.	25%	• Core capabilities defined and capability gaps assessed across the business.
		• Key leadership and core business capabilities brought into the business throughout the year.
		23 out of 25
Complete Industrial Analysis disposal	25%	Industrial Analysis transaction completed in full.
successfully with suitable transition		• Transition plan put in place and delivered in full.
arrangements for the next twelve months.		25 out of 25
Build currency with investment community	10%	Communications with investor community developed.
and potential and current investors.		New investors secured.
		8 out of 10
Total	100%	96%

03: Financial Statements

# Remuneration continued

**Remuneration Report** 

# Details of annual bonus earned in year (audited) continued

GFD objectives and weighting	Weighting	Achievements towards objectives/performance	
Complete Industrial Analysis disposal	30%	Industrial Analysis transaction completed in full.	
successfully with suitable transition		• Transition plan put in place and delivered in full.	
arrangements for the next twelve months.			30 out of 30
Deliver a central and Federal overhead cost	20%	• £2 million savings identify and implemented.	
base commensurate with the post Industrial		• Federal and central teams restructured.	
Analysis Oxford Instruments.			20 out of 20
Manage and proactively drive the ongoing	20%	Implementation completed in two planned locations.	
implementation of Connect and deliver		Rollout plan agreed, communicated and resourced going forward	d.
efficiencies across the Group.			20 out of 20
Build on leadership profile and networks	15%	Strong leadership profile established across the Company.	
within Oxford Instruments and externally.		Communications with investor community developed.	
			14 out of 15
Develop, implement and deliver on the Healthcare business plan.	15%	<ul> <li>Plan agreed and significant changes made to the leadership team structure of the business.</li> </ul>	n and
		• Business did not deliver the financial targets.	
			12 out of 15
Total	100%		96%

The on-target and maximum bonus potentials for the Executive Directors, as well as the amounts actually payable for the year ended 31 March 2018, are set out below.

			Actual bonus	Actual bonus
	On-target	Maximum	payable for	payable for
	bonus	bonus	2017/18	2017/18
	(% of salary)	(% of salary)	(% of salary) <sup>1</sup>	(£'000)
lan Barkshire	75%	100%	63.74%	£268
Gavin Hill	75%	100%	63.74%	£209

1. Bonus is calculated on salary as at 31 March 2018.

### Long-Term Incentive Plans (audited)

There are no Performance Share Plan (PSP) awards held by Executive Directors with performance periods ending in 2017/18.

# Performance Share Plan awards made in the year and outstanding share incentive awards (audited)

		2	on 25 September 2017 were as follows:	Awards made under the PSP of
Vesting date	Share price on day before award date	Percentage of salary	Total number of shares granted	
25 September 2020	£9.605	150%	65,630	lan Barkshire
25 September 2020	£9.605	150%	51,223	Gavin Hill

The awards are subject to two performance conditions measured over a three-year period commencing 1 April 2017. One half of each award is subject to a performance condition based on the Company's compound annualised earnings per share (EPS) growth. The other half of each award is subject to a performance condition based on the Company's return on capital employed in the final year of the performance period.

50% of the award will vest as set out below based on EPS measured over a three-year performance period starting 1 April 2017:

Performance level	EPS growth required	% of award that will vest
Below threshold	Less than 4% per annum over three years	0%
Threshold	4% per annum over three years	25%
Between threshold and maximum	4% to 10% per annum over three years	25% – 100%
Maximum	10% per annum and above over three years	100%

50% of the award will vest as set out below based on return of capital employed (ROCE) being measured for the final year of the three-year performance period starting 1 April 2017:

Performance level	ROCE <sup>1</sup> for the final year of the performance period	% of award that will vest
Below threshold	Less than 13%	0%
Threshold	13%	25%
Between threshold and maximum	Between 13% and 15.5%	25% - 100%
Maximum	15.5% per annum and above	100%

1. ROCE is calculated as EBIT/Average Capital Employed where EBIT is adjusted operating profit less amortisation of acquired intangibles, acquisition related costs and changes in the mark-to-market values of financial instruments and Capital Employed is the sum of net working capital and net book value of fixed assets, goodwill, intangible assets, investments in associates and excluding cash.

As at 31 March 2018, the outstanding options for Ian Barkshire and Gavin Hill under the Executive Share Option Scheme (ESOS) and the PSP<sup>1</sup> were as follows:

		March		vements during th	,	March	Exercise	Share price on date	Date of	Earliest	Latest
Name	Scheme	2018	Granted	Exercised	Lapsed	2017	price	of grant	grant	exercise	exercise
lan Barkshire <sup>2</sup>	ESOS	37,549				37,549	£10.28	£10.31	15/06/15	15/06/18	14/06/25
	ESOS	15,000				15,000	£9.90	£9.87	14/12/11	14/12/14	13/12/21
	PSP	83,390				83,390	Nil	£7.34	21/06/16	21/06/19	20/06/26
	PSP	65,630	65,630				Nil	£9.58	25/09/17	25/09/20	24/09/27
Gavin Hill	PSP	65,085				65,085	Nil	£7.34	21/06/16	21/06/19	20/06/26
	PSP	51,223	51,223			_	Nil	£9.58	25/09/17	25/09/20	24/09/27

1. Dividend equivalents are payable on PSP shares vesting, for the period to vesting in respect of the actual number of shares vesting.

2. Ian Barkshire was appointed to the Board on 10 November 2015. His ESOS options were granted to him as an employee of the Company prior to his appointment to the Board.

The market price of the shares at 31 March 2018 was £7.41 (2017: £8.20) and the range during the year was £6.76 - £11.38 (2017: £6.18 - £8.20).

Performance conditions for outstanding awards are described below:

ESOS		
15 June 2015 <sup>1</sup>		pointed an Executive Director, of market value options granted without oppany's policy for below Executive Director level at that time.
PSP	50% of award	50% of award
21 June 2016 <sup>2</sup>	EPS growth – 7% p.a. (25% vesting) to 12% p.a. (100% vesting)	TSR v FTSE 250 (excluding financial companies <sup>3</sup> ) – median (25% vesting) to upper quartile (100% vesting)
25 September 2017 <sup>4</sup>	EPS growth – 4% p.a. (25% vesting) to 10% p.a. (100% vesting)	ROCE <sup>5</sup> in the final year of the performance period – $13\%$ (25% vesting) to 15.5% (100% vesting)

1. ESOS options granted on 15 June 2015 were only awarded to employees below the level of Executive Director.

2. Three-year performance period commencing 1 April 2016.

3. Sectors excluded – banks, equity investment instruments, financial services, life insurance, non-life insurance, real estate investment trusts and real estate investment services.

4. Three-year performance period commencing 1 April 2017.

5. ROCE is calculated as EBIT/Average Capital Employed where EBIT is adjusted operating profit less amortisation of acquired intangibles, acquisition related costs and changes in the mark-to-market values of financial instruments and Capital Employed is the sum of net working capital and net book value of fixed assets, goodwill, intangible assets, investments in associates and excluding cash.

### Achievement of performance conditions (unaudited)

The calculation of the TSR performance conditions is independently measured. EPS and ROCE performance conditions are measured using the audited accounts of the Company. All performance conditions are then verified by the Remuneration Committee.

### **Dilution limits (unaudited)**

The Company's share plans provide that overall dilution through the issuance of new shares for employee share schemes should not exceed an amount equivalent to 10% of the Company's issued share capital over a ten-year period. The SIP scheme only uses market purchased shares.

The Committee monitors the position prior to the making of any award under these share schemes to ensure that the Company remains within this limit. As at the date of this report, the Company's headroom position remains within the 10% limit.

# Remuneration continued

**Remuneration Report** 

# **Shareholding requirements (audited)**

The Executive Directors are required to build and retain a shareholding in the Company equivalent in value to 150% of basic salary. Until the requirement is met, the Executive Directors are expected to retain or purchase shares equivalent to the value of 50% of the net amount realised on exercise of long-term incentive awards after allowing for tax payable.

Executive Directors' shareholdings as at 31 March 2018 are shown in the table below.

	Legally owned	Percentage of salary held in shares under share holding guideline'	Guideline met as at 31 March 2018	ESOS options vested but unexercised	Subject to performance conditions under the PSP and ESOS unvested
lan Barkshire <sup>2</sup>	11,892	21%	No	15,000	186,569
Gavin Hill	5,500	12%	No	_	116,308

1. Shares valued using the market price of the shares on 31 March 2018: £7.41.

2. Ian Barkshire was appointed to the Board on 10 November 2015. For the share option award granted to him in June 2015, the shareholding requirement is to retain shares on vesting as set out above but over 50% of salary. All awards after the date of his appointment will be subject to the requirement as detailed above.

# **Pension arrangements**

### **Executive Director pension arrangements (audited)**

Under the terms of their service contracts, Executive Directors can ask the Company to contribute to a pension plan of their choice. The Company contributes a maximum of 14% of base salary. Only base salary is pensionable and contributions are not included in the calculation of bonus and share award entitlements. Where the Company's pension contribution exceeds the annual allowance a balancing payment is paid by the Company to the Director, which is taxed as income. In line with the policy for all UK employees, this cash payment is reduced by 12.12% to cover employer's national insurance costs.

During the year, the Company contributed £9,973 (2017: £7,478) into the Company's Group Personal Pension Plan in respect of Ian Barkshire and £9,950 (2017: £9,167) into a personal defined contribution plan in respect of Gavin Hill. Balancing payments to 14% of base salary (net of employer's national insurance contributions) were paid as cash.

lan Barkshire is a deferred member of the defined benefit scheme and is no longer accruing benefits in the scheme. In accordance with the rules of the scheme his deferred benefits are subject to increases in line with statutory revaluation. The transfer value of his accrued benefits at 31 March 2018 was £599,835 (2017: £579,101).

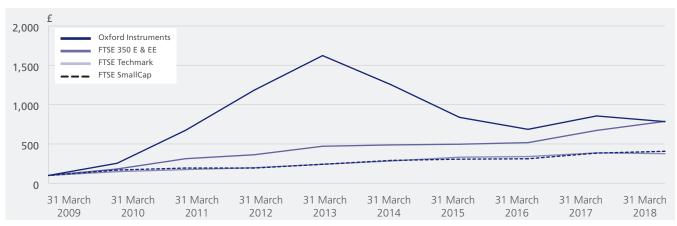
# Payments to past Directors and for loss of office (audited)

Nigel Keen, who ceased to be the Chairman of the Board on 13 September 2016, acted as Chairman of the Trustee of the Oxford Instruments Pension Scheme until 1 September 2017. Imperialise Limited is paid fees for Nigel Keen's services together with a sum equivalent to the employer's national insurance contributions on those fees. He received fees of £10,417 (plus the equivalent of employer's national insurance contributions thereon) in the year to 31 March 2018.

There were no payments to Directors for loss of office.

# Performance graph and CEO's remuneration (unaudited)

The graph below shows for the nine years ended 31 March 2018 the total shareholder return (TSR) on a holding of the Company's ordinary shares compared with a hypothetical holding of shares made up of shares of the same kind and number as those by reference to which the FTSE SmallCap, FTSE Techmark and FTSE 350 Electronic and Electrical Equipment indices are calculated. These indices have been chosen as they are considered to be the most appropriate comparator groups for the Company. TSR has been calculated by reference to the relevant share price for each constituent company assuming dividends are reinvested.



This graph shows the value, by 31 March 2018, of £100 invested in Oxford Instruments plc on 31 March 2009 compared with the value of £100 invested in the FTSE SmallCap, FTSE Techmark and FTSE 350 Electronic and Electrical Equipment indices. The other points plotted are the values at intervening financial year ends.

04: Company Information

The total remuneration of the CEO over the last nine years is shown in the table below. The annual bonus payout and PSP vesting level as a percentage of the maximum opportunity is also shown.

							DJF	IRB	
Year ending 31 March	2011	2012	2013	2014	2015	2016	2017 <sup>1</sup>	2017 <sup>1</sup>	2018
Total remuneration (£'000)	2,596	3,464	2,348	1,179	579	743	64	620	791
Annual bonus outcome (%)	100%	100%	69.1%	15.0%	7.5%	38.6%	0%	56.3%	63.7%
ESOS <sup>2</sup> vesting (%)	100%	100%	100%	100%	0%	0%	0%	N/A	N/A
SELTIS/PSP vesting (%)	50%	100%	100%	100%	0%	0%	0%	N/A	N/A

1. 2016/17 financial year: remuneration shown separately for Jonathan Flint (DJF) who was CEO from 1 April to 11 May 2016 and Ian Barkshire (IRB) who was CEO from 12 May 2016 to 31 March 2017.

2. Executive Directors were last granted ESOS options in June 2014.

# Percentage change in the remuneration of the Chief Executive (unaudited)

The table below shows the percentage change in each of the CEO's salary, taxable benefits and annual bonus earned between 2016/17 and 2017/18, compared to that for the average UK-based employee of the Group (on a per capita basis).

	CEO <sup>1</sup>			Average employee <sup>2</sup>		
£'000	2017/18	2016/17	% change	2017/18	2016/17	% change
Salary	417.7	397.9	5.0%	41.9	41.4	1.2%
Benefits <sup>3</sup>	51.0	20.0	155.0%	1.7	1.9	(10.5%)
Bonus <sup>4</sup>	267.9	230.6	16.2%	1.7	1.3	30.8%

1. The CEO remuneration for 2016/17 is that for Ian Barkshire (who was paid a salary of £300,000 p.a. to 11 May 2016 when he was appointed CEO and for the remainder of that year at £410,000 p.a.).

2. Average employee includes all UK employees in service on 1 April 2016 and 31 March 2018 but excludes those who were on maternity or long-term sick leave.

3. In August 2017, the CEO was provided with a driver. The cost of this benefit for 2017/18 was £29,667.

4. The value of the average employee bonus for the year ended 31 March 2018 (to be paid in July 2018) was not known at the time the Report and Financial Statements were approved and has been subsequently included.

### Relative importance of the spend on pay

The following table shows the Group's employee costs relative to dividends and share buybacks:

	Year ended 31 March 2018	Year ended 31 March 2017	% change
Employee costs <sup>1</sup> (fm)	96.6	114.3	(15.5%)
Dividends (£m)	7.5	7.4	1.4%
Share buybacks (£m)	0.0	0.0	0%

1. The employee costs, restated to take out the employee costs in respect of the Industrial Analysis and Superconducting Wire businesses which were sold in July 2017 and November 2016 respectively, are: year ended 31 March 2018: £92.0 million; year ended 31 March 2017: £92.9 million; percentage change: -1%.

# Statement of Shareholder voting (unaudited)

At last year's AGM, the Directors' Remuneration Policy and Annual Report on Remuneration received the following votes from Shareholders:

		Votes				Votes marked
Resolution	Votes for	discretionary	Votes against	% for	% against	as abstain
To approve the Directors' Remuneration Policy	45,921,808	3,070,455	548,614	98.9	1.1	19,533
To approve the Annual Report on Remuneration	46,473,029	3,070,455	8,393	99.98	0.02	5,533

# Remuneration continued

**Remuneration Report** 

# How the policy will be applied in 2018/19 (unaudited)

### **Base salaries**

In line with the general workforce, the Executive Directors will receive salary increases of 2.5% for 2018/19 effective from 1 July 2018. The CEO's salary as a result of the increase will be £430,750 and the GFD's £336,200.

### **Benefits and pension**

These will be made in accordance with the approved Policy. Benefits will be in line with those received in 2017/18.

### Annual bonus

The maximum opportunity under the annual bonus plan for 2018/19 will be 100% of base salary for both the CEO and GFD.

A combination of financial (85%) and non-financial strategic (15%) metrics will be used to determine the level of payment under the annual bonus for the CEO and GFD and as detailed in the table below:

	Weighting as a % of oppor			
Measure	On target M	1aximum		
Organic sales (£m)	15% 21	1.25%		
Profit (£m)	30% 4	42.5%		
Cash generation (£m)	15% 21	1.25%		
Strategic objectives	Up to 15.0	0%		

Non-financial strategic objectives have been agreed and are linked to the development and implementation of the Horizon strategy. For the CEO these objectives focus on key talent, corporate finance opportunities and operational efficiencies. For the GFD these objectives focus on the implementation of Connect, active management of working capital and growth in the Healthcare division.

The Committee has chosen not to disclose, in advance, the performance targets for the forthcoming year as these include matters which the Committee considers commercially sensitive. Retrospective disclosure of the performance against them will be made in next year's Annual Report on Remuneration.

### Long-term incentives in respect of the 2018/19 financial year

The 2018/19 PSP awards will be over shares with a market value at grant of 150% of salary for the CEO and GFD. Vesting will be subject to the performance conditions as set out below measured over a three-year performance period commencing 1 April 2018. The ranges for both measures have been increased from those set for last year's awards.

Half of the award	Half of the award
EPS growth – 4% p.a. (25% vesting) to 12% p.a. (100% vesting) over	ROCE – 16% in the final year of the performance period
three financial years commencing with the 2018/19 financial year.	(2020/21 financial year) (25% vesting) to 20% (100% vesting).

# **Non-Executive Directors' fees**

The Committee and the Board, as appropriate, have reviewed the fees for the Chairman and Non-Executive Directors. In line with the general workforce, the basic fees for the Non-Executive Directors and Chairman will increase by 2.5% for 2018/19, effective from 1 July 2018.

	2017/18 <sup>1</sup>	2018/19 <sup>1</sup>	% increase
Board Chairman	£169,125	£173,350	2.5%
Additional fee for Deputy Chairman	£5,000	£5,000	0%
Basic fee	£47,500	£48,700	2.5%
Additional fee for Senior Independent Director	£7,500	£7,500	0%
Additional fee for Committee Chairman	£7,500	£7,500	0%

1. The fees shown for 2017/18 and 2018/19 are the annual rates as at 1 July 2017 and 1 July 2018 respectively.

### Approval

This report was approved by the Committee on 12 June 2018 and has been approved subsequently by the Board for submission to Shareholders at the Annual General Meeting to be held on 11 September 2018.

### **Thomas Geitner**

Chairman of the Remuneration Committee

12 June 2018

# Relations with Shareholders

# **Financial calendar**

22 February 2018	Ordinary shares quoted ex-dividend
23 February 2018	Record date for interim dividend
12 March 2018	Dividend reinvestment (DRIP) last date for election
31 March 2018	Financial year end
6 April 2018	Payment of interim dividend
12 June 2018	Announcement of preliminary results
12 June 2018	Announcement of final dividend
July 2018	Publication of Annual Report
11 September 2018	Annual General Meeting
13 September 2018	Ordinary shares quoted ex-dividend
14 September 2018	Record date for final dividend
28 September 2018	DRIP date
19 October 2018	Payment of final dividend
13 November 2018	Announcement of half-year results
March 2019	Ordinary shares quoted ex-dividend
March 2019	DRIP last date for election
March 2019	Record date for interim dividend
31 March 2019	Financial year end

# Administrative enquiries concerning shareholdings

You may view your shareholding and dividend history, register to receive your dividends direct to your bank account or elect to re-invest your dividends and register a change of address online at **www.signalshares.com**. To register to use this facility you will need your Investor Code (IVC), which can be found on your share certificate, dividend confirmation statement or proxy card.

Administrative enquiries concerning shareholdings in Oxford Instruments plc, such as the loss of a share certificate, dividend payments, or a change of address should be directed, in the first instance, to the Registrar, Link Asset Service, The Registry, 34 Beckenham Road, Beckenham, Kent BR3 4TU.

Tel: +44 (0)871 664 0300 (calls cost 12 pence per minute plus your phone company's access charge. Calls outside the United Kingdom will be charged at the applicable international rate. Lines are open between 09:00 – 17:30, Monday to Friday excluding public holidays in England and Wales).

Email: shareholder.enquiries@linkgroup.co.uk

# Website: www.signalshares.com

Correspondence should refer to Oxford Instruments plc and state clearly the registered name and address of the Shareholder. Please notify the Registrar promptly of any change of address.

# **Dividend bank mandates**

If you wish dividends to be paid directly into a bank or building society account and notification to be sent to your Shareholder register address, please contact the Company's Registrar at the address given above for a dividend mandate form. Overseas holders can also choose to receive payment directly into their bank account, or can be sent a draft in local currency. Further details on international payments are available from Link Asset Services at the contact details below.

Tel: +44 (0)871 664 0385 (calls cost 12 pence per minute plus your phone company's access charge. Calls outside the United Kingdom will be charged at the applicable international rate. Lines are open between 09:00 – 17:30, Monday to Friday excluding public holidays in England and Wales).

## Website: www.signalshares.com

# **Duplicate share register accounts**

If you are receiving more than one copy of our report, it may be that your shares are registered in two or more accounts on our register of members. If that was not your intention you might consider merging them into one single entry. Please contact Link Asset Services, who will be pleased to carry out your instructions.

# **Investor publications**

The Group website provides up-to-date information on corporate and investor news, as well as a wide range of additional supporting documentation.

The Company's Annual and Interim Reports are available to download from the website, alongside recent recordings of the city results presentations.

# Find out more online

www.oxinst.com/investors



# Relations with Shareholders continued

# **Shareholder communications**

Unless you have elected to continue to receive Shareholder communications by post, you will be notified by post or, where you have given us an email address for electronic notification, by email that Shareholder communications are available for viewing on the Company's website at **www.oxinst.com/investors**. The Company reserves the right to distribute any communication in hard copy if it deems this necessary.

### Shareholder enquiries

Shareholders who have questions relating to the Group's business or who wish to have additional copies of the Report and Financial Statements should apply to:

Company Secretary

Oxford Instruments plc, Tubney Woods, Abingdon, Oxfordshire OX13 5QX Tel: 01865 393200 Fax: 01865 393442 Email: info.oiplc@oxinst.com Website: **www.oxinst.com** 

# **Company registration**

Registered office: Tubney Woods, Abingdon Oxfordshire OX13 5QX

Registered in England number: 775598 Website: **www.oxinst.com** 

Oxford Instruments has an extensive website which gives details of all its products and services, contact information, vacancies and latest news announcements. An interactive investor relations section gives information on recent trading reports, share price data and forthcoming events.

# **Link Share Dealing Services**

A guick and easy share dealing service to either sell or buy shares in many leading UK companies is provided by Link Share Dealing Services. An online and telephone facility is available, providing our Shareholders with an easy-to-access and simple-to-use service. There's no need to pre-register and there are no complicated forms to fill in. The online and telephone dealing service allows you to trade "real time" at a known price which will be given to you at the time you give your instruction. To deal online or by telephone all you need is your surname, Investor Code (IVC) reference number, full postcode, your date of birth and National Client Identifier. Your Investor Code can be found on a recent share certificate, statement or tax voucher. Should you not be able to locate your IVC number, please contact Link Asset Services on +44 (0)871 664 0300 (calls cost 12 pence per minute plus your phone company's access charge. Calls outside the United Kingdom will be charged at the applicable international rate. Lines are open between 09:00 - 17:30, Monday to Friday excluding public holidays in England and Wales). Please have the appropriate documents to hand when you log on or call, as this information will be needed before you can buy or sell shares.

For further information on this service, or to buy and sell shares, please contact **www.linksharedeal.com** (online dealing) or +44 (0)371 664 0445 (telephone dealing). Calls are charged at the standard geographic rate and will vary by provider. Calls outside the United Kingdom will be charged at the applicable international rate. Lines are open between 09:00 – 17:30, Monday to Friday excluding public holidays in England and Wales). Full terms, conditions and risks apply and are available on request or by visiting **www.linksharedeal.com**.

This is not a recommendation to buy or sell shares. Remember the price of shares can go down as well as up, and you are not guaranteed to get back the amount that you originally invested.

# Analysis of Shareholders as at 31 March 2018

Size of shareholding	Number of holders	% of total	Total holding	% of total
Up to 5,000 shares	1,943	87.60	1,162,372	2.03
5,001 to 50,000 shares	155	6.99	2,657,360	4.63
50,001 to 200,000 shares	35	1.58	2,557,872	4.46
Over 200,000 shares	85	3.83	50,998,000	88.88
Total	2,218	100	57,375,604	100

The Directors present their Report and the Financial Statements of Oxford Instruments plc for the year ended 31 March 2018.

# Principal activity and business reviews

**Report of** 

the **Directors** 

The Company is the ultimate holding company of a group of subsidiary undertakings ("the Group") engaged in the research, development, manufacture, rental, sale and service of high technology tools and systems. The Company is required to set out in this report a true and fair view of the business of the Group during the financial year ended 31 March 2018, the position of the Group at the end of the financial year and a description of the principal risks and uncertainties facing the Group. The information which fulfils these requirements includes an Operations and Finance Review on pages 20 to 34 and Corporate Responsibility on pages 40 to 47, which are incorporated in this report by reference. The operations, the strategic review, the Research and Development activities and likely future prospects of the Group are reviewed in the Strategic Report on pages 1 to 47.

# **Results and dividends**

The results for the year are shown in the Consolidated Statement of Income on page 91. The Directors recommend a final dividend of 9.6 pence per ordinary share, which together with the interim dividend of 3.7 pence per ordinary share makes a total of 13.3 pence per ordinary share for the year (2017: 13.0 pence). Subject to Shareholder approval, the final dividend will be paid on 19 October 2018 to Shareholders registered at close of business on 14 September 2018.

# **Risks and uncertainties**

The Board exercises proper and appropriate corporate governance for the Group. It ensures that there are effective systems of internal controls in place to manage Shareholders' interests and the Group's assets, including the assessment and the management of the risks to which the businesses are exposed, and to monitor and manage the compliance with all the legal requirements that affect the Group's worldwide business activities. However, such systems are designed to manage rather than eliminate the risk of failure to achieve business objectives and can provide only reasonable and not absolute assurance against material misstatement or loss.

The Executive Directors report to the Board on changes in the business and in the external environment which may affect the risks which the Group faces. The Executive Directors also provide the Board with monthly financial information. Key performance indicators are reviewed periodically.

There are a number of risks and uncertainties which may have a material effect on the Oxford Instruments Group. These are described in Principal Risks on pages 35 to 38.

### **Directors**

Biographies of all the Directors at the date of this report, including the Non-Executive Directors, appear on pages 50 and 51. During the year, on 1 July 2017, Stephen Blair was appointed Non-Executive Director and Senior Independent Director of the Company.

# **Directors' conflicts of interest**

The Companies Act 2006 allows Directors of public companies to authorise conflicts and potential conflicts of interest, where appropriate. Only Directors with no interest in the matter under consideration may participate in the relevant decision and in doing so they must act in a way which they consider in good faith will be most likely to promote the Company's success. A conflicts policy has been drawn up, which is reviewed annually, and a register of conflicts and potential conflicts is maintained.

# **Directors' interests**

The beneficial interests of the Directors in the Company's share capital, all in fully paid up shares at 31 March 2018, are shown below.

Details of share options for the Executive Directors are shown in the Remuneration Report on pages 67 to 78.

	31 March 2018 Shares	31 March 2017 Shares
lan Barkshire	11,982	5,982
Stephen Blair	—	_
Richard Friend	—	_
Thomas Geitner	—	_
Gavin Hill	5,500	_
Alan Thomson	5,000	_
Mary Waldner	1,000	

No Director was beneficially interested in the shares of any subsidiary company at any time during the year.

In the year to 31 March 2018 no Director had a material interest in any contract of significance with the Company or any of its subsidiaries. Since the year end, there have been no changes to the above shareholdings apart from for Ian Barkshire and Gavin Hill, who each joined the Oxford Instruments Share Incentive Plan shortly before the year end and since the year end have each increased their beneficial holding by 251 shares.

# Insurance cover and Directors' indemnities

For a number of years, the Group has purchased insurance to cover its Directors and Officers against their costs in defending themselves in legal proceedings taken against them in that capacity and in respect of damages resulting from the unsuccessful defence of any proceedings. In addition, to the extent permitted by UK law, the Group indemnifies its Directors and Officers for liabilities arising from such proceedings.

Neither the insurance nor the indemnity provides cover for situations where the Director has acted fraudulently or dishonestly.

# Share capital

The Company only has one class of share capital which comprises ordinary shares of 5 pence each. All shares forming part of the ordinary share capital have the same rights and carry one vote each. There are no unusual restrictions on the transfer of a share. The full rights and obligations attaching to the Company's ordinary shares, as well as the powers of the Directors, are set out in the Company's Articles of Association, a copy of which is available on the Company's website. These can also be obtained from Companies House or by writing to the Company Secretary.

During the year to 31 March 2018 the issued share capital was increased by 0.1% with the issue of 59,688 ordinary shares (2017: 17,005) following the exercise of options under the Company's share option schemes. At 31 March 2018, the issued share capital of the Company was therefore 57,375,604 ordinary shares of 5 pence each. In connection with the Company's equity incentive plans, a separately administered trust held 183,145 ordinary shares at 31 March 2018 (representing 0.3% of the total issued share capital of the Company). No shares in the Company were acquired by the Company during the year (2017: nil). Details of the share capital and options outstanding as at 31 March 2018 are set out in Notes 23 and 12 respectively to the Financial Statements.

# Report of the Directors continued

# Share capital continued

At this year's Annual General Meeting, the Directors propose to renew the authorities granted to them at last year's AGM to:

- allot ordinary shares up to an aggregate nominal value of one-third of the Company's issued share capital and, where full pre-emption rights are applied, up to an aggregate nominal value of two-thirds of the Company's issued share capital;
- allot ordinary shares up to an aggregate nominal value of 10% of the Company's issued share capital without first offering them to existing Shareholders; and
- buy back up to 10% of the Company's issued share capital.

Shareholders will be requested to renew these authorities at the AGM, details of which are set out in the Notice of the Meeting.

# Substantial shareholdings

The following are beneficial interests of 3% or more (where the holding is direct), or of 5% or more (where the holding is indirect), which have been notified to the Directors of the Company, in accordance with Chapter 5 of the Disclosure and Transparency Rules, of the Company's issued ordinary share capital, the only class of voting capital, at 6 June 2018:

	Direct/ indirect	Shares ′000	% of total
Ameriprise	Indirect/		
Financial	direct	8,080,361	14.1
Standard Life			
Aberdeen plc	Indirect	3,715,599	6.5
Sir MF and			
Lady KA Wood	Direct	3,105,530	5.4
Baillie Gifford			
& Co	Indirect	2,917,516	5.1

# **Payment of suppliers**

The Group does not follow a standard payment practice but agrees terms and conditions for its business transactions with each of its suppliers. Payment is then made in accordance with these terms. At 31 March 2018 trade creditors of the Company and the Group's UK subsidiaries were equivalent to 45 days (2017: 11) and 67 days (2017: 64) of purchases respectively, based on the amounts invoiced by suppliers during the year and the amounts owed to trade creditors at the end of the year.

# **Charitable donations**

During the year, the Group made charitable donations of £5,068 (2017: £8,585). There have been no political donations during the year.

# **Fixed** assets

Whilst the market value of some fixed assets may differ from book value, the Directors believe that the differences are not material.

# Disclosure of information to auditor

Pursuant to Section 418(2) of the Companies Act 2006, the Directors who held office at the date of approval of this Directors' Report confirm that, so far as they are each aware, there is no relevant audit information of which the Company's auditor is unaware; and each Director has taken all the steps that he or she might reasonably have been expected to have taken as a Director to make himself or herself aware of any relevant audit information and to establish that the Company's auditor is aware of that information.

# **Annual General Meeting**

The Notice of the Annual General Meeting to be held on 11 September 2018 is set out in a letter to Shareholders together with explanatory notes relating to the resolutions.

A resolution to re-appoint KPMG LLP as auditor and to authorise the Directors to set their remuneration will be proposed at the Annual General Meeting.

# **Change of control arrangements**

There are a number of agreements that take effect, alter or terminate upon a change of control of the Company following a takeover, such as banking agreements and Company share plans. On a change of control, the Company's committed credit facilities may be cancelled by lenders by giving not less than three days' notice. It is also possible that pension plan funding arrangements would need to be changed following a change of control if that resulted in a weakening of the employer covenant.

# **Corporate governance**

The Board reviews its work on corporate governance in the Corporate Governance Report on pages 52 to 58.

# Financial risk management

Details of the Group's financial risk management objectives and policies, including the exposure to price, credit and liquidity risk are set out in Note 21 to the Financial Statements.

# **Diversity and inclusion**

The Board recognises that its employees are fundamental to the Group's success. The Group's aim is to ensure there are equal opportunities for all employees and that there is an inclusive culture where differences are valued and people are given the environment in which they can do their best work. Corporate Responsibility on pages 40 to 47 further describes how diversity and inclusion is managed within Oxford Instruments.

# Greenhouse gas emissions

To meet the requirements of the Companies Act 2006 (Strategic and Directors' Report) Regulations 2013, CO<sub>2</sub> emissions are reported on as part of our reporting on greenhouse gas emissions in Corporate Responsibility on pages 45 to 46.

### **Material events**

There were no material events since the year end to report.

By order of the Board

# Susan Johnson-Brett

Company Secretary

12 June 2018

# **Directors' Responsibilities**

in relation to the Report and Financial Statements

The Directors are responsible for preparing the Annual Report and the Group and Parent Company Financial Statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare Group and Parent Company Financial Statements for each financial year. Under that law they are required to prepare the Group Financial Statements in accordance with IFRSs as adopted by the EU and applicable law and have elected to prepare the Parent Company Financial Statements in accordance with UK Accounting Standards, including FRS 101 Reduced Disclosure Framework.

Under company law, the Directors must not approve the Financial Statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and Parent Company and of their profit or loss for that period. In preparing each 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;
- for the Group Financial Statements, state whether they have been prepared in accordance with IFRSs as adopted by the EU;
- for the Parent Company Financial Statements, state whether applicable UK Accounting Standards have been followed, subject to any material departures disclosed and explained in the Parent Company Financial Statements;
- assess the Group and Parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and
- use the going concern basis of accounting unless they either intend to liquidate the Group or the Parent Company or to cease operations, or have no realistic alternative but to do so.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Parent Company's transactions and disclose with reasonable accuracy at any time the financial position of the Parent Company and enable them to ensure that its Financial Statements comply with the Companies Act 2006. 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, Directors' Report, Remuneration Report and Corporate Governance Statement that comply with that law and those regulations.

The Directors are 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.

# Responsibility statement of the Directors in respect of the annual financial report

We confirm that to the best of our knowledge:

- the 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 profit or loss of the Company and the undertakings included in the consolidation taken as a whole; and
- the Strategic Report/Directors' Report include a fair review of the development and performance of the business and the position of the issuer and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face.

We consider the Report and Financial Statements, taken as a whole, is fair, balanced and understandable and provides the information necessary for Shareholders to assess the Group's position and performance, business model and strategy.

Signed on behalf of the Board

**Ian Barkshire** Chief Executive 12 June 2018

Group Finance Director

**Gavin Hill** 

# **Independent Auditor's Report**

to the members of Oxford Instruments plc

# 1. Our opinion is unmodified

We have audited the financial statements of Oxford Instruments plc ("the Company") for the year ended 31 March 2018 which comprise the Consolidated Statement of Income, Consolidated statement of Comprehensive Income, Consolidated Statement of Financial Position, Consolidated Statement of Changes in Equity, Consolidated Statement of Cash Flows, Company Balance Sheet, Company Statement of Changes in Equity and the related notes, including the accounting policies set out on pages 98 to 104.

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 March 2018 and of the Group's profit for the year then ended;
- the Group financial statements have been properly prepared in accordance with International Financial Reporting Standards as adopted by the European Union;
- the parent Company financial statements have been properly prepared in accordance with UK accounting standards, 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.

### **Basis for opinion**

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities are described below. We believe that the audit evidence we have obtained is a sufficient and appropriate basis for our opinion. Our audit opinion is consistent with our report to the audit committee.

We were appointed as auditor by the Company before 1984. The period of total uninterrupted engagement is for more than the 35 financial years ended 31 March 2018. We have fulfilled our ethical responsibilities under, and we remain independent of the Group in accordance with, UK ethical requirements including the FRC Ethical Standard as applied to listed public interest entities. No non-audit services prohibited by that standard were provided.

Overview		
Materiality: group financial statements as a whole	£1.5m (2017: £1.1m) 4.8% (2017: 5.0%) of group profit before tax from continuing operations adjusted for restructuring costs, net profit on disposal of buildings, share of impairment recognised by associate and mark to market gains in respect of derivative financial instruments of £31.4 millio	on
Coverage	91% (2017: 92%) of group profit before tax from continuing operations	
Risks of material	misstatement vs	2017
Recurring risks	Revenue recognition in the NanoScience and Plasma business units	
	Completeness and accuracy of provisions in respect of intellectual property claims	
	Parent company: valuation of investments held by the parent company	•

# 2. Key audit matters: our assessment of risks of material misstatement

Key audit matters are those matters that, in our professional judgement, were of most significance in the audit of the financial statements and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by us, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. We summarise below the key audit matters, in decreasing order of audit significance, in arriving at our audit opinion above, together with our key audit procedures to address those matters and, as required for public interest entities, our results from those procedures. These matters were addressed, and our results are based on procedures undertaken, in the context of, and solely for the purpose of, our audit of the financial statements as a whole, and in forming our opinion thereon, and consequently are incidental to that opinion, and we do not provide a separate opinion on these matters.

# The risk Revenue recognition 2017/2018 sales:

(Revenue: £296.9

million (2017:

£300.2 million))

Risk vs 2017

Refer to page 64

committee report),

policy) and pages

Completeness

of intellectual

(£3.2 million,

property claims

2017: £3.2 million)

Risk vs 2017 **♦** 

Refer to page 64 (Audit and Risk

committee report),

page 98 (accounting

policy) and page 131

(financial disclosures)

and accuracy of

provisions in respect

disclosures

page 102 (accounting

107 to 109 (financial

(Audit and Risk

There is a risk that revenue is recognised on sales before the significant risks and rewards of ownership have passed, particularly in the Plasma and NanoScience business units.

Given the complex nature of the products, judgement is required in determining whether the risks and rewards have passed by assessing a number of factors, notably, whether shipping terms have been met and the complexity of any installation element of the sale. As such there is a risk that, revenue is recognised in the incorrect period.

Furthermore, due to the seasonality of the business, a significant proportion of these businesses revenue is recognised in March resulting in an increased risk of revenue being recognised in the incorrect period. Consequently this is one of the key areas our audit is focused on.

#### Omitted exposure:

The Group designs and builds customised, high technology products, incorporating specific complex design features and intellectual property. As such there is a risk that the Group infringes the intellectual property belonging to third parties.

This could result in a material unrecorded provision for compensation required to be paid to third parties.

#### Subjective estimate:

The estimation of any provision required for intellectual property claims is inherently subjective based on the wide range of potential outcomes due to differing settlement methods and royalty rates.

Valuation of investments held by the parent company (£320.9 million; 2017: £320.5 million)

#### Low risk/high value:

The carrying amount of the parent company's investments in subsidiaries represents 92% (2017: 82%) of the company's total assets. Their recoverability is not at a high risk of significant misstatement or subject to significant judgement. However, due to their materiality in the context of the parent company financial statements, this is considered to be the area that had the greatest effect on our overall parent company audit.

#### Our response

Our procedures included:

#### Tests of details

Testing, on a sample basis, whether specific revenue transactions around the year end had been recognised in the appropriate period by assessing whether the significant rewards of ownership had passed, with reference to, nature of products, the terms of sale within the associated contracts and the relative complexity of product installation.

Considering whether a sample of credit notes issued after the year end should reduce revenue in the period and challenging those that were not by obtaining evidence to support any adjustments made.

Assessing a sample of year end deferred and accrued income against contractual terms and evidence of transfer of risks and rewards to determine whether revenue for this sample has been recognised in the correct period.

#### Our results

We found the revenue recognised in the Plasma and NanoScience business units to be acceptable (2017: acceptable).

#### Omitted exposure procedures:

**Personnel interviews:** Enquiring with Group's internal legal counsel and business unit managers regarding new and previously unrecorded intellectual property claims and the likelihood of the claims.

**Compliance data scrutiny:** Inspecting the Group's litigation register and correspondence between the group and other parties, including legal advisers, for unrecorded claims and assessing whether a provision is required for these claims.

#### Subjective estimate procedures:

**Our sector experience:** Challenging the reasonableness of the key assumptions made by the Group, such as potential royalty rates payable in respect of intellectual property claims and likelihood of an outflow of resources against our own expectations based on our historical knowledge, experience and understanding and our review of correspondence with competitors.

**Enquiry of lawyers:** Enquiring with the Group's external legal advisers in respect of open matters of litigation regarding the likelihood of an outflow of resources and the appropriateness of assumptions used, including the royalty rates applied in calculating a provision.

**Personnel interviews:** Evaluating assumptions through discussion of claims with Group's internal legal counsel and relevant business unit managers.

Assessing transparency: Assessing whether the Group's disclosures regarding the range of possible outcomes appropriately reflect the risks identified.

### Our results

We found the level of provisions for potential infringements of a competitors intellectual property to be acceptable (2017: acceptable).

#### Our procedures included:

Tests of detail: Comparing the carrying amount of 100% of investments with the relevant subsidiaries' draft balance sheet to identify whether their net assets, being an approximation of their minimum recoverable amount, were in excess of their carrying amount and assessing whether those subsidiaries have historically been profit-making.

Assessing subsidiary audits: Assessing the work performed by the subsidiary audit team for a sample of subsidiaries and considering the results of that work, on those subsidiaries' profits and net assets.

**Our sector experience:** For the investments where the carrying amount exceeded the net asset value, performing our own assessment of the key assumptions used to estimate recoverable amount such as forecast cash flows, long-term growth rates and the discount rate applied with reference to historical performance of similar lines of business and externally derived data including, industry growth rates and market interest rates.

## Our results

We found the group's assessment of the recoverability of the investment in subsidiaries to be acceptable (2017: acceptable).

We continue to perform procedures over the recoverability of acquired intangible assets. However, following the impairments recognised in the prior year in relation to the Healthcare and Asylum businesses and improved current year performance, we have not assessed this as one of the most significant risks in our current year audit and, therefore, it is not separately identified in our report this year.

# Independent Auditor's Report continued

to the members of Oxford Instruments plc only

# 3. Our application of materiality and an overview of the scope of our audit

Materiality for the group financial statements as a whole was set at £1.5m (2017: £1.1m), determined with reference to a benchmark of profit before tax from continuing operations normalised to exclude restructuring costs, net profit on disposal of buildings, share of impairment recognised by associate and mark to market gains in respect of derivative financial instruments as disclosed in note 1. Total profits and losses that made up normalised Group profit before tax from continuing operations is calculated as £31.4m (2017: £22.2m) of which materiality represents 4.8% (2017: 5.0%).

Materiality for the parent company financial statements as a whole was set at £1.0m (2017: £0.8m), determined with reference to a benchmark of company total assets, of which it represents 0.3% (2017: 0.2%).

We agreed to report to the Audit and Risk Committee any corrected or uncorrected identified misstatements exceeding £75,000, in addition to other identified misstatements that warranted reporting on qualitative grounds.

Of the group's 72 (2017: 70) reporting components, we subjected 14 (2017: 16) to full scope audits for group purposes and 3 (2017: 4) to specified risk-focused audit procedures. The latter were not individually financially significant enough to require a full scope audit for group purposes, but did present specific individual risks that needed to be addressed.

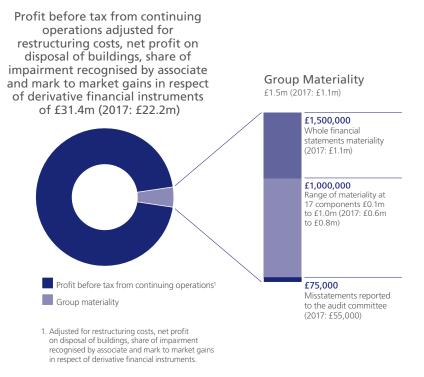
The group team performed procedures on the items excluded from normalised group profit before tax.

The components within the scope of our work accounted for the percentages indicated opposite.

The remaining 6% (2017: 7%) of total group revenue, 9% (2017: 8%) of total profits and losses that made up group profit before tax from continuing operations and 8% (2017: 10%) of total group assets is represented by 55 (2017: 50) reporting components, none of which individually represented more than 2% (2017: 2%) of any of total group revenue, group profit before tax or total group assets. For these residual components, we performed analysis at an aggregated group level to re-examine our assessment that there were no significant risks of material misstatement within these.

The Group team visited 6 (2017: 6) component locations in the UK, USA and Sweden (2017: UK, USA, Sweden and Germany) to confirm appropriate execution of the audit strategy & plan and inspect their findings. Video and telephone conference meetings were also held with these component auditors and all others that were not physically visited. At these visits and meetings, the findings reported to the Group team were discussed in more detail, and any further work required by the Group team was then performed by the component auditor.

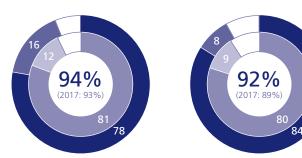
The Group team instructed component auditors as to the significant areas to be covered, including the relevant risks detailed above and the information to be reported back. The Group team approved the component materialities, which ranged from £0.1m to £1.0m (2017: £0.6m to £0.8m), having regard to the mix of size and risk profile of the Group across the components. The work on 8 of the 17 components (2017: 12 of the 24 components) was performed by component auditors and the rest, including the audit of the parent company, was performed by the Group team.



# 02: Governance







Total profits and losses that made up group profit before tax from continuing operations



Specified risk-focused audit procedures 2017

Residual components

# 4. We have nothing to report on going concern

We are required to report to you if:

- we have anything material to add or draw attention to in relation to the directors' statement on page 39 of the financial statements on the use of the going concern basis of accounting with no material uncertainties that may cast significant doubt over the Group and Company's use of that basis for a period of at least twelve months from the date of approval of the financial statements; or
- if the related statement under the Listing Rules set out on page 39 is materially inconsistent with our audit knowledge.

We have nothing to report in these respects.

# 5. We have nothing to report on the other information in the Annual Report

The directors are responsible for the other information presented in the Annual Report together with the financial statements. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except as explicitly stated below, any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether, based on our financial statements audit work, the information therein is materially misstated or inconsistent with the financial statements or our audit knowledge. Based solely on that work we have not identified material misstatements in the other information.

### Strategic report and directors' report

Based solely on our work on the other information:

- we have not identified material misstatements in the strategic report and the directors' report;
- in our opinion the information given in those reports for the financial year is consistent with the financial statements; and
- in our opinion those reports have been prepared in accordance with the Companies Act 2006.

# Directors' remuneration report

In our opinion the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006.

# Disclosures of principal risks and longer-term viability

Based on the knowledge we acquired during our financial statements audit, we have nothing material to add or draw attention to in relation to:

- the directors' confirmation within the viability statement on page 38 that they have carried out a robust assessment of the principal risks facing the Group, including those that would threaten its business model, future performance, solvency and liquidity;
- the Principal Risks disclosures describing these risks and explaining how they are being managed and mitigated; and
- the directors' explanation in the viability statement of how they have assessed the prospects of the Group, over what period they have done so and why they considered that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group 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.

Under the Listing Rules we are required to review the viability statement. We have nothing to report in this respect.

# Independent Auditor's Report continued

to the members of Oxford Instruments plc only

# 5. We have nothing to report on the other information in the Annual Report continued

Corporate governance disclosures

We are required to report to you if:

- we have identified material inconsistencies between the knowledge we acquired during our financial statements audit and the directors' statement that they consider that the annual report and financial statements taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy; or
- the section of the annual report describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee.

We are required to report to you if the Corporate Governance Statement does not properly disclose a departure from the eleven provisions of the UK Corporate Governance Code specified by the Listing Rules for our review.

We have nothing to report in these respects.

# 6. We have nothing to report on the other matters on which we are required to report by exception

Under the Companies Act 2006, 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 nothing to report in these respects.

# 7. Respective responsibilities

# Directors' responsibilities

As explained more fully in their statement set out on page 85, the directors are responsible for: the preparation of the financial statements including being satisfied that they give a true and fair view; for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error; assessing the Group and parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and using the going concern basis of accounting unless they either intend to liquidate the Group or the parent Company or to cease operations, or have no realistic alternative but to do so.

### Auditor's responsibilities

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or other irregularities (see below), or error, and to issue our opinion in an auditor's report. Reasonable assurance is a high level of assurance, but does not guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud, other irregularities or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

A fuller description of our responsibilities is provided on the FRC's website at **www.frc.org.uk/auditorsresponsibilities**.

#### Irregularities - ability to detect

We identified areas of laws and regulations that could reasonably be expected to have a material effect on the financial statements from our sector experience and through discussion with the directors and other management (as required by auditing standards).

We had regard to laws and regulations in areas that directly affect the financial statements including financial reporting (including related company legislation) and taxation legislation. We considered the extent of compliance with those laws and regulations as part of our procedures on the related financial statement items.

We communicated identified laws and regulations throughout our team and remained alert to any indications of non-compliance throughout the audit.

As with any audit, there remained a higher risk of non-detection of non-compliance with relevant laws and regulations (irregularities), as these may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.

# 8. The purpose of our audit work and to whom we owe our responsibilities

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.

### Greg Watts (Senior Statutory Auditor)

for and on behalf of KPMG LLP, Statutory Auditor Chartered Accountants

One Snowhill Snow Hill Queensway Birmingham B4 6GH

12 June 2018



# **Consolidated Statement of Income**

year ended 31 March 2018

			2018			2017	
	-		Adjusting			Adjusting	
	Notes	Adjusted <sup>1</sup> £m	items <sup>1</sup> £m	Total £m	Adjusted <sup>1</sup> £m	items <sup>1</sup> £m	Total £m
Revenue	3	296.9	_	296.9	300.2		300.2
Cost of sales		(146.0)	_	(146.0)	(142.9)	_	(142.9)
Gross profit		150.9	_	150.9	157.3		157.3
Research and Development	5	(23.4)	_	(23.4)	(23.6)	(0.7)	(24.3)
Selling and marketing		(53.9)	_	(53.9)	(54.1)	—	(54.1)
Administration and							
shared services		(28.5)	(12.1)	(40.6)	(28.8)	(49.6)	(78.4)
Share of profit/(loss) of associate, net of tax	6	0.5	(2.4)	(1.9)	(0.8)	(8.4)	(9.2)
Other operating income		—	3.3	3.3	—	_	_
Foreign exchange		0.9	3.1	4.0	(12.0)	1.2	(10.8)
Operating profit/(loss)		46.5	(8.1)	38.4	38.0	(57.5)	(19.5)
Other financial income	8	0.3	—	0.3	0.2	_	0.2
Financial income		0.3	—	0.3	0.2		0.2
Interest charge on pension scheme net liabilities	25	(0.6)	—	(0.6)	(1.1)		(1.1)
Other financial expenditure	9	(3.9)	—	(3.9)	(5.6)	(0.2)	(5.8)
Financial expenditure		(4.5)	—	(4.5)	(6.7)	(0.2)	(6.9)
Profit/(loss) before income tax							
from continuing operations		42.3	(8.1)	34.2	31.5	(57.7)	(26.2)
Income tax (expense)/credit	13	(10.1)	(4.5)	(14.6)	(7.8)	8.5	0.7
Profit/(loss) for the year from							
continuing operations		32.2	(12.6)	19.6	23.7	(49.2)	(25.5)
(Loss)/profit from discontinued operations after tax	7	(0.4)	46.3	45.9	4.3	0.9	5.2
Profit/(loss) for the year attributable						( )	()
to equity Shareholders of the parent		31.8	33.7	65.5	28.0	(48.3)	(20.3)
		pence		pence	pence		pence
Earnings per share							
Basic earnings per share	2						
From continuing operations		56.3		34.3	41.5		(44.7)
From discontinued operations		(0.7)		80.2	7.5		9.1
From profit/(loss) for the year		55.6		114.5	49.0		(35.6)
Diluted earnings per share	2						
From continuing operations		56.1		34.1	41.4		(44.7)
From discontinued operations		(0.7)		80.0	7.5		9.1
From profit/(loss) for the year		55.4		114.1	48.9		(35.6)
Dividends per share							
Dividends paid	14			13.0			13.0
Dividends proposed	14			13.3			13.0

1. Adjusted numbers are stated to give a better understanding of the underlying business performance. Details of adjusting items can be found in Note 1 to the Financial Statements.

During the current year, the Group amended the presentation in the Income Statement to include the change in fair value derivatives in operating expenses rather than financial income or expenditure. Prior year comparatives have been re-presented to be consistent with this change and, as a result, £1.2 million has now been included on the foreign exchange line. There is no impact on profit after tax in either period.

The attached notes form part of the Financial Statements.

# Consolidated Statement of Comprehensive Income year ended 31 March 2018

		2018	2017
	Notes	£m	£m
Profit/(loss) for the year		65.5	(20.3)
Other comprehensive income/(expense):			
Items that may be reclassified subsequently to profit or loss			
Gain on effective portion of changes in fair value of cash flow hedges, net of amounts recycled		_	0.1
Foreign exchange translation differences		(8.8)	18.8
Net cumulative foreign exchange gain on disposal of subsidiaries recycled to the Income Statement		(4.8)	(5.7)
Items that will not be reclassified subsequently to profit or loss			
Remeasurement gain in respect of post-retirement benefits	25	2.2	4.4
Tax on items that will not be reclassified to profit or loss	13	(0.9)	(0.9)
Total other comprehensive (expense)/income		(12.3)	16.7
Total comprehensive income/(expense) for the year			
attributable to equity Shareholders of the parent		53.2	(3.6)

# **Consolidated Statement of Financial Position**

as at 31 March 2018

	Notes	2018 £m	2017 £m
Assets			
Non-current assets			
Property, plant and equipment	15	22.8	32.5
Intangible assets	16	158.7	181.0
Investment in associate	6	4.1	3.9
Long-term receivables	19	1.4	3.6
Deferred tax assets	17	13.4	26.0
		200.4	247.0
Current assets			
Inventories	18	45.9	53.9
Trade and other receivables	19	73.3	81.1
Current income tax recoverable		2.5	4.2
Derivative financial instruments	22	2.4	0.6
Cash and cash equivalents		20.7	27.2
		144.8	167.0
Total assets		345.2	414.0
Equity			
Capital and reserves attributable to the Company's equity Sharehold	lers		
Share capital	23	2.9	2.9
Share premium		61.7	61.5
Other reserves		0.2	0.2
Translation reserve		9.2	22.8
Retained earnings		105.6	45.1
		179.6	132.5
Liabilities			
Non-current liabilities			
Bank loans and overdrafts	24	39.4	129.6
Retirement benefit obligations	25	15.3	25.1
Provisions	27	1.7	
Deferred tax liabilities	17	6.1	5.6
		62.5	160.3
Current liabilities			
Bank loans and overdrafts	24	1.0	6.9
Trade and other payables	26	85.5	93.0
Current income tax payables		6.2	6.5
Derivative financial instruments	22	0.4	5.0
Provisions	27	10.0	9.8
		103.1	121.2
Total liabilities		165.6	281.5
Total liabilities and equity		345.2	414.0

The Financial Statements were approved by the Board of Directors on 12 June 2018 and signed on its behalf by:

**Ian Barkshire** Director Gavin Hill Director

Company number: 775598

02: Governance

# **Consolidated Statement of Changes in Equity**

		Share		Foreign		
	Share	premium	Other	exchange translation	Retained	
Very ended 24 March 2040	capital fm	account	reserves	reserve fm	earnings	Total
Year ended 31 March 2018		fm C1 F	£m		fm 45.1	122 F
Balance at 1 April 2017	2.9	61.5	0.2	22.8	45.1	132.5
Total comprehensive income/(expense):						
Profit for the year	—		—	—	65.5	65.5
Other comprehensive income:						
- Foreign exchange translation differences	—	_	—	(8.8)	—	(8.8)
- Net foreign exchange gain on disposal of						
subsidiaries recycled to the Income Statement	—		—	(4.8)	—	(4.8)
- Remeasurement gain in respect of post-retirement benefits	—		—	—	2.2	2.2
- Tax on items recognised directly in other comprehensive income	—	—	—	—	(0.9)	(0.9)
Total comprehensive income/(expense) attributable						
to equity Shareholders of the parent	—	_	—	(13.6)	66.8	53.2
Transactions with owners recorded directly in equity:						
- Proceeds from issue of shares	—	0.2	_	—	—	0.2
<ul> <li>Charge in respect of employee service costs</li> </ul>						
settled by award of share options	—		—	—	1.1	1.1
– Dividends paid	—	—	_	_	(7.4)	(7.4)
Total transactions with owners						
recorded directly in equity	_	0.2	_	_	(6.3)	(6.1)
Balance at 31 March 2018	2.9	61.7	0.2	9.2	105.6	179.6

Year ended 31 March 2017	Share capital £m	Share premium account £m	Other reserves £m	Foreign exchange translation reserve £m	Retained earnings £m	Total £m
Balance at 1 April 2016	2.9	61.5	0.1	9.7	68.8	143.0
Total comprehensive income/(expense):						
Profit for the year			_		(20.3)	(20.3)
Other comprehensive income:						
- Foreign exchange translation differences			_	18.8		18.8
<ul> <li>Net foreign exchange loss on disposal of</li> </ul>						
subsidiaries taken to the Income Statement	_			(5.7)	—	(5.7)
<ul> <li>Loss on effective portion of changes in fair value of cash flow hedges, net of amounts recycled</li> </ul>	_	_	0.1	_		0.1
- Remeasurement gain in respect of						
post-retirement benefits	_			—	4.4	4.4
<ul> <li>Tax on items recognised directly in other comprehensive income</li> </ul>	_	_	_	_	(0.9)	(0.9)
Total comprehensive income/(expense) attributable						
to equity Shareholders of the parent	_		0.1	13.1	(16.8)	(3.6)
Transactions with owners recorded directly in equity:						
– Charge in respect of employee service costs settled						
by award of share options	—			—	0.5	0.5
– Dividends paid				—	(7.4)	(7.4)
Total transactions with owners						
recorded directly in equity	_		—		(6.9)	(6.9)
Balance at 31 March 2017	2.9	61.5	0.2	22.8	45.1	132.5

Other reserves comprise the capital redemption reserve, which represents the nominal value of shares repurchased and then cancelled during the year ended 31 March 1999, and the hedging reserve in respect of the effective portion of changes in value of commodity contracts.

The foreign exchange translation reserve comprises all foreign exchange differences arising since 1 April 2004 from the translation of the Group's net investments in foreign subsidiaries into Sterling.

The Group holds 183,145 (2017: 183,145) of its own shares in an employee benefit trust. The cost of these shares is included within retained earnings. There was no movement in the shares held by the trust during the year.

# **Consolidated Statement of Cash Flows**

year ended 31 March 2018

	2018 £m	2017 £m
Profit/(loss) for the year	65.5	(20.3)
Profit for the year from discontinued operations (Note 7)	(45.9)	(5.2)
Profit/(loss) for the year from continuing operations	19.6	(25.5)
Adjustments for:		
Income tax expense/(credit)	14.6	(0.7)
Net financial expense	4.2	6.7
Fair value movement on financial derivatives	(3.1)	(1.2)
Acquisition related costs	—	0.3
Restructuring costs	1.2	0.4
Restructuring costs – relating to associate	0.4	0.4
One-off impairment of capitalised development costs	—	0.7
Loss on disposal of subsidiary	—	0.4
Net profit on disposal of buildings	(3.3)	—
Share of impairment recognised by associate	2.0	—
Impairment of investment in associate	—	8.0
Amortisation and impairment of acquired intangibles	10.9	46.3
Impairment of capitalised intangible software costs	—	2.2
Depreciation of property, plant and equipment	4.7	5.1
Amortisation and impairment of capitalised development costs	4.4	3.8
Adjusted earnings before interest, tax, depreciation and amortisation	55.6	46.9
Loss on disposal of property, plant and equipment	0.3	0.5
Cost of equity settled employee share schemes	1.1	0.5
Share of (profit)/loss from associate	(0.5)	0.8
Restructuring costs paid	(1.3)	(1.1)
Foreign currency loss on intra-Group dividends	—	(0.8)
Cash payments to the pension scheme more than the charge to operating profit	(7.9)	(6.9)
Operating cash flows before movements in working capital	47.3	39.9
Increase in inventories	(4.5)	(1.7)
Increase in receivables	(14.4)	(1.1)
Increase/(decrease) in payables and provisions	2.8	(2.5)
Increase in customer deposits	2.9	0.9
Purchase of rental assets held for subsequent sale	(0.7)	(1.0)
Cash generated from continuing operations	33.4	34.5
Interest paid	(2.1)	(5.0)
Income taxes paid	(3.8)	(2.1)
Net cash from operating activities – continuing operations	27.5	27.4
Net cash from operating activities – discontinued operations	3.0	6.1
Net cash flow from operating activities	30.5	33.5

	2018 £m	2017 £m
Cash flows from investing activities		
Proceeds from sale of property, plant and equipment	9.3	_
Acquisition of subsidiaries, net of cash acquired	_	(9.8)
Acquisition of property, plant and equipment	(4.3)	(3.0)
Acquisition of intangible assets	(0.5)	(0.1)
Net cash flow on disposal of businesses	71.2	12.2
Capitalised development expenditure	(5.8)	(5.9)
Increase in investment in associate	(2.1)	_
Decrease in long-term receivables	0.9	_
Net cash generated from/(used in) investing activities – continuing operations	68.7	(6.6)
Net cash used in investing activities – discontinued operations	_	(2.5)
Net cash generated from/(used in) investing activities	68.7	(9.1)
Cash flows from financing activities		
Proceeds from issue of share capital	0.2	_
Decrease in borrowings	(96.8)	(12.8)
Dividends paid	(7.4)	(7.4)
Net cash used in financing activities	(104.0)	(20.2)
Net (decrease)/increase in cash and cash equivalents	(4.8)	4.2
Cash and cash equivalents at beginning of the year	26.5	20.4
Effect of exchange rate fluctuations on cash held	(1.0)	1.9
Cash and cash equivalents at end of the year	20.7	26.5

# Reconciliation of changes in cash and cash equivalents to movement in net debt

	2018	2017
	£m	£m
(Decrease)/increase in cash and cash equivalents	(4.8)	4.2
Effect of foreign exchange rate changes on cash and cash equivalents	(1.0)	1.9
	(5.8)	6.1
Cash outflow from decrease in debt	96.8	12.8
Accrued interest	(1.0)	
Amortisation of prepaid issuance fees	(0.4)	_
Movement in net debt in the year	89.6	18.9
Net debt at start of the year	(109.3)	(128.2)
Net debt at the end of the year	(19.7)	(109.3)

01: Strategic Report

# **Accounting Policies**

Oxford Instruments plc (the "Company") is a company incorporated and domiciled in the UK.

The Group Financial Statements have been prepared and approved by the Directors in accordance with International Financial Reporting Standards as adopted by the EU ("Adopted IFRS"). The Company has elected to prepare its Parent Company Financial Statements in accordance with FRS 101; these are presented on pages 134 to 144.

The accounting policies set out below have, unless otherwise stated, been applied consistently to all periods presented in these Group Financial Statements.

The Financial Statements have been prepared on a going concern basis based on the Directors' opinion, after making reasonable enquiries, that the Group has adequate resources to continue in operational existence for the foreseeable future.

The Group's business activities, together with the factors likely to affect its future development, performance and position, are set out in the Strategy section on pages 16 to 17. The financial position of the Group, its cash flows, liquidity position and borrowing facilities are described in the Finance Review on pages 28 to 34.

The relatively diverse nature of the Group together with its current financial strength provides a solid foundation. The Directors have reviewed the Group's forecasts and flexed them to incorporate a number of potential scenarios relating to changes in trading performance and believe that the Group will be able to operate within its existing debt facilities which expire between February 2020 and March 2021. This review also considered hedging arrangements in place. As a consequence, the Directors believe that the Group is well placed to manage its business risks successfully. Further information can be found in the Viability Statement on page 38.

The Financial Statements were authorised for issuance on 12 June 2018.

### (a) New accounting standards

The following standards and interpretations are applicable to the Group and have been adopted as they are mandatory for the year ended 31 March 2018:

- Amendments to IAS 7 Cash Flow Statements; and
- Amendments to IAS 12 Income Taxes.

# (b) Significant estimates and judgements

The preparation of Financial Statements requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

# Significant judgements Revenue recognition

Revenue is recognised when, in the opinion of the Group, the significant risks and rewards of ownership have transferred to the buyer. The complex technical nature of the Group's products, particularly in the Materials & Characterisation and Research & Discovery segments, means that the application of judgement is required in determining whether those risks and rewards have passed by assessing a number of factors, notably whether shipping terms have been met and the complexity of any installation element of the sale.

### **Significant estimates**

Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods. The key areas where estimates have been used and assumptions applied are as follows.

# Measurement of defined benefit scheme liabilities

The Group recognises and measures costs relating to defined benefit pension schemes in accordance with IAS 19 (Revised) Employee Benefits. In applying IAS 19 (Revised) the costs are assessed in accordance with the advice of independent qualified actuaries. This requires certain estimates and assumptions in relation to future changes in salaries and inflation, as well as mortality rates, expected returns on plan assets and the selection of suitable discount rates. The factors affecting these assumptions are influenced by wider macro-economic factors that are largely outside of the Group's control. A sensitivity analysis is set out in Note 25.

### Provisions for IP-related claims

Provisions for IP-related claims are recognised in the period when it becomes probable that there will be a future outflow of funds resulting from past expectations or events which can be reasonably estimated. The timing of recognition requires the application of judgement to existing facts and circumstances which can be subject to change. Amounts provided represent the Group's best estimate of exposure based on currently available information.

Key assumptions surrounding estimation uncertainty relate to estimating potential royalty or profit sharing rates surrounding any product-related intellectual property claims (see Note 27).

### Taxation

Significant estimation is required in determining the provision for taxes as the tax treatment is often by its nature complex, and cannot be finally determined until a formal resolution has been reached with the relevant tax authority, which may take several years to conclude. Amounts provided are accrued based on management's interpretation of country-specific tax laws and the likelihood of settlement. Where necessary, management will seek external professional advice. Actual liabilities could differ from the amount provided, which could have a consequent adverse impact on the results and net position of the Group. Further detail is provided in Note 13.

# (c) Basis of preparation and consolidation

The Financial Statements are presented in Sterling, rounded to the nearest £0.1m and are prepared on the historical cost basis except as described on page 99 under the heading "Financial instruments".

The Group Financial Statements include the accounts of Oxford Instruments plc and its subsidiary companies adjusted to eliminate intra-Group balances and any unrealised gains and losses or income and expenses arising from intra-Group transactions.

Subsidiaries are entities controlled by the Group. Control exists when the Group is exposed to or has rights to variable returns from its investment with the investee and has the ability to affect those returns through its power over the investee. In assessing control, potential voting rights that are currently exercisable or convertible are taken into account. The results of subsidiary companies are included in the consolidated Financial Statements from the date that control commences until the date that control ceases. The acquisition method is used to account for the acquisition of subsidiaries.

Associates are those entities in which the Group holds more than 20% of the shares and voting rights and has significant influence, but not control, over the financial and operating policies.

The Group financial information includes the Group's share of the total comprehensive income of the associate on an equity accounted basis, 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 associate, 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. The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on consolidation, are translated into Sterling at exchange rates ruling at the end of the reporting period. Income statements and cash flows of foreign operations are translated into Sterling at average monthly exchange rates which approximate foreign exchange rates at the date of the transaction. Foreign exchange differences arising on retranslation are recognised through the Statement of Comprehensive Income.

# (d) Foreign currency

An individual entity's transactions in foreign currencies are translated at the foreign exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the reporting date are translated at the foreign exchange rate ruling at that date. Foreign exchange differences arising on translation are recognised in profit or loss. Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction.

### (e) Financial instruments

Financial assets and liabilities are recognised in the Group's Consolidated Statement of Financial Position when the Group becomes a party to the contractual provisions of the instrument. Derivative financial instruments of the Group are used to hedge its exposure to interest rate, foreign currency and commodity pricing risks arising from operational, financing and investment activities. The Group does not hold or issue derivative financial instruments for trading purposes. All derivatives are initially recognised at fair value: attributable transaction costs are recognised in profit or loss as incurred. Derivatives comprising interest rate swaps, foreign exchange contracts and options and metal futures contracts are classified as "fair value through profit and loss" under IAS 39, unless designated as hedges. Subsequent to initial recognition, derivatives are measured at fair value and gains or losses on the settlement of such derivatives are recognised in operating expenses. Where such derivatives relate to the following year's exposure, any gains or losses resulting from the change in fair value are recognised as an adjusting item in operating expenses.

Changes in the fair value of the derivative hedging instruments designated as cash flow hedges are recognised in equity to the extent that the hedge is effective. To the extent that the hedge is ineffective, changes in fair value are recognised in the Consolidated Statement of Income. If the hedging instrument no longer meets the criteria for hedge accounting, expires or is sold, terminated or exercised, then hedge accounting is discontinued prospectively. The cumulative gain or loss previously recognised in equity remains there until the forecast transaction occurs. When the hedged item is a non-financial asset, the amount recognised in equity is transferred to the carrying amount of the asset when it is recognised. In other cases the amount recognised in equity is transferred to the Consolidated Statement of Income in the same period that the hedged item affects profit or loss.

The fair value of interest rate swaps is based on broker quotes. Those quotes are tested for reasonableness by discounting estimated future cash flows based on the terms and maturity of each contract and using market interest rates for a similar instrument at the measurement date.

The fair value of forward exchange contracts is their market price at the Consolidated Statement of Financial Position date, being the present value of the forward price. The gain or loss on remeasurement to fair value of forward exchange contracts is recognised immediately in the Consolidated Statement of Income.

Contingent purchase consideration is measured at fair value at the date of acquisition and subsequently carried at fair value, with movements recognised in the Income Statement.

Interest-bearing borrowings are recognised initially at fair value less attributable transaction costs. Subsequent to initial recognition, interest-bearing borrowings are stated at amortised cost with any difference between cost and redemption value being recognised in profit or loss over the period of the borrowing on an effective interest basis.

# Accounting Policies continued

# (f) Property, plant and equipment

Property, plant and equipment is stated at historical cost less provisions for impairment (see accounting policy I) and depreciation which, with the exception of freehold land which is not depreciated and rental assets (see below), is provided on a straight-line basis over each asset's estimated economic life. Depreciation is provided based on historical cost less estimated residual value. The principal estimated economic lives used for this purpose are:

•	Freehold buildings, long leasehold land and buildings	50 years
•	Leasehold improvements (less than 50 years' duration)	Period of lease
•	Furniture and fittings	10 years
•	Machinery and other equipment	5 to 10 years
•	Computer equipment	4 years
•	Vehicles	4 years

Fixed assets held for rental as part of the Group's service business are depreciated using the reducing balance method at a rate of 3% per month.

Proceeds on disposal of rental assets which have been refurbished by the Group are recorded as revenue with associated costs recorded in cost of sales. Otherwise gains and losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment and are recognised in the Income Statement.

### (g) Intangible assets (i) Goodwill

All business combinations are accounted for by applying the acquisition method. Goodwill represents amounts arising on acquisition of subsidiaries. In respect of business acquisitions that have occurred since 31 March 2004, goodwill represents the difference between the cost of the acquisition and the fair value of the assets, liabilities and contingent liabilities acquired. In respect of acquisitions prior to this date, goodwill is included on the basis of its deemed cost, which represents the amount recorded under previous GAAP.

The Group expenses transaction costs associated with its acquisitions and movements in liabilities relating to contingent consideration within the Income Statement in conformity with IFRS 3. Goodwill arising on acquisitions is stated at cost less any accumulated impairment losses and allocated to cash generating units that are anticipated to benefit from the combination. It is not amortised but is tested annually for impairment (see accounting policy I), or more frequently when there is an indicator that the unit may be impaired.

# (ii) Development costs

Research and Development costs are charged to the Consolidated Statement of Income in the year in which they are incurred unless development expenditure is applied to a plan or design for the production of new or substantially improved products, in which case they are capitalised. The criteria for capitalisation include demonstration of the technical feasibility of completing a new intangible asset that will be available for sale and that the asset will generate probable future economic benefits. Where expenditure meets the criteria, development costs are capitalised and amortised through the Consolidated Statement of Income over their useful economic lives.

### (iii) Acquired intangible assets

An intangible asset acquired with a subsidiary undertaking is recognised as an intangible asset if it is separable from the acquired business or arises from contractual or legal rights, is expected to generate future economic benefits and its fair value can be reliably measured. The asset is amortised through the Consolidated Statement of Income over it useful economic life.

# (iv) Amortisation

Amortisation of intangible assets is charged to the Consolidated Statement of Income on a systematic basis in proportion to the use of the assets over their estimated useful economic lives as follows:

Capitalised	
development costs	3 to 5 years
Technology related acquired intangibles	5 to 12 years
Customer related acquired intangibles	6 months to 15 years
Development costs	
acquired intangibles	10 years
Software	10 years

# (h) Trade and other receivables

Trade and other receivables are initially recognised at fair value and subsequently stated at their amortised cost less appropriate allowances for amounts which are expected to be non-recoverable.

# (i) Inventories

Inventories are stated at the lower of cost and net realisable value. Cost includes materials, direct labour, an attributable proportion of production overheads based on normal operating capacity and all other expenditure incurred in acquiring the inventories and bringing them to their existing location and condition. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

Provision is made for obsolete, slow-moving and defective stock where appropriate in light of recent usage, expected future requirements, new product introduction plans and likely realisable values.

# (j) Cash and cash equivalents

Cash and cash equivalents are carried in the Statement of Financial Position at amortised cost.

Cash and cash equivalents comprise cash balances and call deposits and are carried at amortised cost. Bank overdrafts that are repayable on demand and form an integral part of the Group's cash management are included as a component of cash and cash equivalents for the purpose of the Statement of Cash Flows.

# (k) Non-current assets held for sale

A non-current asset is classified as held for sale if its carrying amount will be recovered principally through sale rather than through continuing use, it is available for immediate sale and sale is highly probable within one year.

Immediately before classification as held for sale, the measurement of the assets is brought up to date in accordance with applicable IFRS. Then, on initial classification as held for sale, non-current assets are recognised at the lower of their carrying amount and fair value less costs to sell.

Impairment losses on initial classification as held for sale are included in the Consolidated Statement of Income, even when the asset has previously been revalued. The same applies to gains and losses on subsequent remeasurement.

# (I) Impairment of non-current assets

All non-current assets are tested for impairment whenever events or circumstances indicate that their carrying value may be impaired. Additionally, goodwill is subject to an annual impairment review.

For the purposes of impairment testing assets are grouped together into the smallest group of assets that generates cash flows from continuing use that are largely independent of the cash inflows from other groups of assets.

An impairment loss is recognised in the Consolidated Statement of Income as under the administration and shared services heading, to the extent that an asset's carrying value, or a cash generating unit's carrying value, exceeds its recoverable amount, which represents the higher of its net realisable value and its value in use. Value in use is the present value of the future cash flows expected to be derived from the asset or from the cash generating unit to which it relates. The present value is calculated using a discount rate that reflects the current market assessment of the time value of money and the risks specific to the asset concerned.

Impairment losses recognised in previous periods for an asset other than goodwill are reversed if there has been a change in estimates used to determine the asset's recoverable amount, but only to the extent that the carrying amount of the asset does not exceed its carrying amount had the impairment loss not been recognised in previous periods. Impairment losses in respect of goodwill are not reversed.

Impairment losses recognised in respect of cash generating units are allocated first to reduce the carrying amount of any goodwill allocated to cash generating units and then to reduce the carrying amount of the other assets in the unit.

# (m) Employee benefits

The Group operates a number of defined benefit and defined contribution plans which require contributions to be made to independent trustee-administered funds.

# (i) Defined contribution plans

Obligations for contributions to defined contribution pension plans are recognised as an expense in the Consolidated Statement of Income as incurred.

# (ii) Defined benefit plans

The Group's net obligation in respect of defined benefit pension plans is calculated separately for each plan by estimating the amount of future benefit that current and past employees have earned in return for their service in prior periods. That benefit is discounted to determine its present value and the fair value of any plan assets is deducted. The calculation is performed by a qualified actuary using the projected unit credit method.

All actuarial gains and losses in calculating the Group's net obligation are recognised in the Consolidated Statement of Comprehensive Income in the year.

The charge to the Consolidated Statement of Income reflects the current service cost. The interest expense or income is calculated on the net defined benefit liability by applying the discount rate to the net defined benefit liability, and is included within financial expenditure or financial income in the Consolidated Statement of Income respectively.

# (iii) Share-based payment transactions

The fair value of equity settled share option programmes is measured at grant date and charged to the Consolidated Statement of Income, with a corresponding increase in equity, on a straight-line basis over the period during which the employees become unconditionally entitled to the options. The fair value of the options granted is measured using an option valuation model, taking into account the terms and conditions upon which the options were granted.

The amount recognised as an expense is adjusted to reflect the actual number of share options that vest, except where forfeiture is only due to market performance conditions not being met.

# (n) Provisions

A provision is recognised in the Consolidated Statement of Financial Position when the Group has a present legal or constructive obligation as a result of a past event and it is probable that an outflow of economic benefits will be required to settle the obligation. A provision for warranty and product related liability is recognised when the underlying products are sold. A provision for restructuring is recognised when the Group has approved a detailed and formal restructuring plan and the restructuring has either commenced or has been announced publicly. A provision for onerous contracts is recognised when the expected benefits to be derived by the Group from a contract are lower than the unavoidable cost of meeting its obligations under the contract. A provision for a claim or dispute is made when it is considered probable that an adverse outcome will occur and the amount of the loss can be reasonably estimated.

Contractual and other provisions represent the Directors' best estimate of the cost of settling future obligations where the Directors, taking into account professional advice received, assess that it is more likely than not that such proceedings may be successful.

If the effect is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liabilities.

# (o) Trade and other payables

Trade and other payables are initially recognised at their fair value and subsequently stated at amortised cost.

# (p) Government grants

Grants from governments are recognised at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions.

Government grants relating to costs are deferred and recognised in the Income Statement over the period necessary to match them with the costs they are intended to compensate. Government grants relating to property, plant and equipment are included in other current liabilities and are credited to the Income Statement on a straight-line basis over the expected useful economic lives of the related assets.

# Accounting Policies continued

# (q) Interest-bearing borrowings

Interest-bearing borrowings are recognised initially at fair value less attributable transaction costs. Subsequent to initial recognition, interest-bearing borrowings are stated at amortised cost with any difference between cost and redemption value being recognised in the Income Statement over the period of the borrowings on an effective interest basis.

# (r) Revenue

Revenue is recognised in the Consolidated Statement of Income when the significant risks and rewards of ownership have transferred to the buyer. This is generally considered to be on dispatch for products that have a low level of customisation, are manufactured on a routine basis and typically have no installation requirement. In the Materials & Characterisation and Research & Discovery segments, products can be bespoke and customer contracts more complex. As such, there are a number of conditions which must be satisfied before revenue can be recognised. These can include: legal; contractual ownership; passing internal quality control testing; dispatch from manufacturing sites; installation at customer sites; customer inspection both before and after installation; and/or, ultimately, customer acceptance. Given these conditions, a greater degree of consideration is given as to whether the terms of sale have been met and whether revenue can be recognised for each product. In the Service & Healthcare segment, revenue for maintenance and support is recognised on a pro-rata basis over the length of the contract period. Revenue relating to the rental of machinery is recognised on a straight-line basis over the life of the lease. Where the Service & Healthcare segment makes asset sales, similar considerations as those set out for the Materials & Characterisation and Research & Discovery segments are applied. For contracts which combine the sale of goods and provision of services, the contracts revenue is allocated across the individual components in line with their relative value. Revenue excludes value added tax and similar sales-based taxes and is stated before commission payable to agents.

# (s) Income tax

Income tax on the profit or loss for the year comprises current and deferred tax. Income tax is recognised in profit or loss except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The following temporary differences are not provided for: the initial recognition of goodwill; the initial recognition of assets or liabilities that affect neither accounting nor taxable profit; and differences relating to investments in subsidiaries to the extent that they will probably not reverse in the future.

The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the Statement of Financial Position date.

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the asset can be utilised. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

Additional income taxes that arise from the distribution of dividends are recognised at the same time as the liability to pay the related dividend.

# (t) Lease payments

Payments made under operating leases are recognised in profit or loss on a straight-line basis over the term of the lease. Lease incentives received are recognised in the Income Statement as an integral part of the total lease expense.

# (u) Segment reporting

An operating segment is a distinguishable component of the Group that engages in business activities from which it may earn revenues and incur expenses, including any revenues and expenses that relate to transactions with any of the Group's other components. Operating components are combined into aggregated operating segments to the extent that they have similar economic characteristics. Aggregated operating segments' operating results are reviewed regularly by the Group's Board of Directors to make decisions about resources to be allocated to the segment and to assess its performance, for which discrete financial information is available. Segment results that are reported to the Board include items directly attributable to a segment as well as those that can be allocated on a reasonable basis

A reportable segment is an aggregated operating segment in respect of which revenue or profit exceeds 10% of the Group total. Discrete financial information is disclosed for each reportable segment.

# (v) Dividends

Interim and final dividends are recognised as a liability when they are no longer at the discretion of the Company.

# (w) New standards and interpretations not yet adopted

The following standards and interpretations are applicable to the Group but have not been adopted as they are not yet effective for the year ended 31 March 2018:

### **IFRS 9 Financial Instruments**

Transition to IFRS 9 for the Group will take effect from 1 April 2018 with the half-year results for September 2018 being IFRS 9 compliant, and the first Annual Report published in accordance with IFRS 9 being for the year ended 31 March 2019. There is no requirement to restate comparatives.

04: Company Information

IFRS 9 addresses the classification, measurement and derecognition of financial instruments, introduces a new impairment model for financial assets and new rules for hedge accounting. It replaces IAS 39 Financial Instruments guidance and comprehensive updates have been made to IFRS 7 Financial Instruments: Disclosure and IAS 32 Financial Instruments: Presentation.

The impact assessment performed by the Group included a review of the classification and measurement of financial instruments; the impairment of financial assets and the Group hedging policy which resulted in the following conclusions:

- The Group reviewed the classification and measurement of each of its financial instruments. Although the classification of instruments is altered under IFRS 9, this does not result in any changes to the measurement approach apart from the impairment of trade receivables, which is addressed below.
- The new impairment model for financial • assets requires the recognition of impairment provisions based on expected credit losses rather than only incurred credit losses as is the case under IAS 39. The Group will apply the simplified approach to its trade receivables as per the scope exception in IFRS 9 in which all loss allowances for trade receivables will be measured at initial recognition and throughout its life at an amount equal to lifetime expected credit losses. This is consistent with the nature of the Group's trade receivables as they do not include a significant financing component. Based on the assessments undertaken to date, the Group does not expect a material movement in the loss allowance for trade receivables.
- The new hedge accounting rules will align the accounting for hedging instruments more closely with the Group's risk management practices. The Group is still assessing to what extent it will be able to hedge account such that derivative financial instruments currently used to hedge foreign exchange and interest rate risk, and recorded at fair value through profit or loss and in adjusting items, will be recorded at fair value through other comprehensive income. Due to the inherent volatility in the fair value of foreign currency and interest rate derivative contracts, it is not possible to reliably estimate the impact of the new hedge accounting rules on the future results of the Group. If the Group had fully applied hedge accounting from 1 April 2017, the impact on reported profit for the year ended 31 March 2018 would have been a decrease of £3.1m, with a corresponding increase in other reserves of £3.1m.

# IFRS 15 Revenue from Contracts with Customers

The Group has adopted IFRS 15 Revenue from Contracts with Customers using the modified retrospective approach, which means that the cumulative impact on adoption will be recognised in retained earnings as of 1 April 2018 with the half-year results for September 2018 being IFRS 15 compliant, and the first Annual Report published in accordance with IFRS 15 being for the year ended 31 March 2019. Comparatives will not be restated. IFRS 15 provides a single, principles-based, five-step model to be applied to all sales contracts, based on the transfer of control of goods and services to customers, and it replaces the separate model for goods and services of IAS 18 Revenue.

Management carried out a comprehensive impact assessment which included scoping the Group's revenues to identify different revenue streams and performing sample contract reviews to determine the appropriate revenue recognition treatment under IFRS 15. To ensure a consistent approach across the Group, the exercise was supported centrally through setting the approach to transition and providing the appropriate tools and guidance. Revenue is derived from a single performance obligation which is either the sale of goods or the provision of services.

Under IFRS 15, revenue from the sale of goods, where the goods are not required to be installed, will continue to be recognised when legal title transfers to the customer on delivery.

When the sale of goods is combined with installation, revenue recognition depends upon the nature of the installation. Simple installations are those which the customer perceives as a separate obligation within the overall contract to deliver goods, whereas complex installations are those for which the installation is an integral part of the delivery of the goods. Revenue will be recognised for simple installations separately from the delivery of goods, and only when the installation has occurred. For complex installations, revenue recognition on the delivery of the goods will be deferred until installation is complete.

Revenue from the provision of services, including ongoing support, servicing and maintenance, will continue to be recognised in line with the delivery of the service.

For contracts which combine sale of goods and provision of services, the contract's revenue will continue to be allocated across the individual components in line with the relative value and accounted for as described above.

# Accounting Policies continued

### (w) New standards and interpretations not yet adopted continued

IFRS 15 Revenue from Contracts with Customers continued

The overall impact on transition on 1 April 2018 for the Group is expected to be as follows:

	Decrease in	Increase in
	retained	deferred
	earnings	income
Segment	£m	£m
Materials & Characterisation	0.1	0.8
Research & Discovery	8.8	21.0
Service & Healthcare	_	
Group	8.9	21.8

If the Group had applied IFRS 15 from 1 April 2017, the impact on reported revenue for the year ended 31 March 2018 would have been a decrease of £7.8m.

#### **IFRS 16 Leases**

Transition to IFRS 16 for the Group will take effect from 1 April 2018 with the half-year results for September 2018 being IFRS 16 compliant, with the first Annual Report published in accordance with IFRS 16 being for the year ended 31 March 2019. IFRS 16 provides a single model for lessees which recognises a right of use asset and lease liability for all leases which are longer than one year or which are not classified as low value. The impact of IFRS 16 will be to recognise a lease liability and a corresponding asset in the Statement of Financial Position for leases currently classified as operating leases. The most significant impact will be that the Group's land, building and car leases will be recognised on the balance sheet. The overall impact on the Group Statement of Financial Position on transition on 1 April 2018 is expected to be the recognition of a lease liability and corresponding asset to the value of £11.2m. The table below summarises the effect that IFRS 15 and IFRS 16 would have had on the Group Statement of Income if they had been applied for the year to 31 March 2018:

		Operating
	Revenue	profit
	£m	£m
As reported in the Group Statement of Income	296.9	35.3
Effect of IFRS 15 Revenue from Contracts with Customers	(7.8)	(3.6)
Effect of IFRS 16 Leases		(0.2)
	289.1	31.5

# Notes to the Financial Statements

year ended 31 March 2018

# **1 Non-GAAP measures**

In the preparation of adjusted numbers, the Directors exclude certain items in order to assist with comparability between peers and to give what they consider to be a better indication of the underlying performance of the business. These adjusting items are excluded in the calculation of adjusted operating profit, adjusted profit before income tax, adjusted profit for the year from continuing operations, adjusted EBITDA, adjusted EPS, adjusted cash conversion, and adjusted effective tax rate. Details of adjusting items are given below.

Adjusted EBITDA is calculated by adding back depreciation of property, plant and equipment and amortisation of intangible assets to adjusted operating profit and can be found in the Consolidated Statement of Cash Flows. Calculation of adjusted EPS can be found in Note 2. Adjusted effective tax rate is calculated by dividing the share of tax attributable to adjusted profit before tax by adjusted profit before tax. Definitions of cash conversion and return on capital employed are set out in the KPI section.

### Reconciliation between profit before income tax and adjusted profit from continuing operations

	201	2018		2017	
	Operating profit £m	Profit before income tax £m	Operating (loss)/profit £m	(Loss)/profit before income tax £m	
Statutory measure from continuing operations	38.4	34.2	(19.5)	(26.2)	
Acquisition related costs	_	_	0.3	0.3	
Restructuring costs	1.2	1.2	0.4	0.4	
Restructuring costs – relating to associate	0.4	0.4	0.4	0.4	
Loss on disposal of subsidiary	—	—	0.4	0.4	
Net profit on disposal of buildings	(3.3)	(3.3)		_	
Unwind of discount in respect of contingent consideration					
and acquisition related accruals	—	_		0.2	
Business reorganisation items	(1.7)	(1.7)	1.5	1.7	
Impairment of acquired intangibles	—	—	33.8	33.8	
Impairment of investment in associate	—	—	8.0	8.0	
Share of impairment recognised by associate	2.0	2.0	—	—	
Impairment of capitalised development costs	—	—	0.7	0.7	
Impairment of capitalised software costs	—	—	2.2	2.2	
Amortisation of acquired intangibles	10.9	10.9	12.5	12.5	
Mark-to-market gain in respect of derivative financial instruments	(3.1)	(3.1)	(1.2)	(1.2)	
Adjusted measure from continuing operations	46.5	42.3	38.0	31.5	
Share of taxation		(10.1)		(7.8)	
Adjusted profit for the year from continuing operations		32.2		23.7	
Adjusted effective tax rate		23.9%		24.8%	

Acquisition related costs comprise professional fees incurred in relation to mergers and acquisitions activity and any consideration which, under IFRS 3 (revised), falls to be treated as a post-acquisition employment expense.

Restructuring costs of £1.2m primarily relate to our US Healthcare business and include £0.5m to successfully defend a legal claim relating to a prior acquisition.

During the prior year the Group settled various claims totalling £0.4m relating to the disposal of its Omicron business in 2016.

The Group recorded a net profit on disposal of £3.3m during the year, following the disposal of two buildings previously held under property, plant and equipment. The effect of the disposal on the Group's balance sheet position is shown in Note 16.

During the year the Group's equity accounted associate recognised an impairment relating to the disposal of its Vacgen subsidiary. The Group's share of this impairment was £2.0m.

Adjusted profit excludes the non-cash amortisation and impairment of acquired intangible assets and goodwill and the unwind of discounts in respect of contingent consideration relating to business combinations. Impairments in respect of capitalised development costs would not normally be treated as adjusting items although in certain circumstances they may be; for example, in the prior year a project was completely cancelled as part of a wider restructuring plan.

Adjusting items include the income tax on each of the items described above. In addition, during the year the tax rate in the United States reduced from 35% to 21%. As a result, this has reduced the deferred tax asset by £5.4m. This has been excluded from the calculation of share of taxation attributable to adjusted profit before tax.

# Notes to the Financial Statements continued

year ended 31 March 2018

# 1 Non-GAAP measures continued

**Reconciliation between profit before income tax and adjusted profit from continuing operations** continued During the prior year the Group recognised the following impairments:

- £8.0m relating to its equity accounted associate investment. See Note 6 for further details.
- £0.7m concerning capitalised development costs that related to a specific internal systems project that was stopped as the Group focused and directed resources so as to accelerate key projects.
- £2.2m relating to capitalised software costs, following a reassessment of the future value expected to be derived from internally developed software.

The Group reports ineffectiveness of its hedging as an adjusting item. In the prior year this included losses on certain contracts relating to the hedging of the Japanese Yen which were not required for ordinary trading and which were re-allocated for use against the remittance of net income of the Group's Japan operations. Additionally, under IAS 39, all derivative financial instruments are recognised initially at fair value. Subsequent to initial recognition, they are also measured at fair value. In respect of instruments used to hedge foreign exchange risk and interest rate risk the Group does not take advantage of the hedge accounting rules provided for in IAS 39 since that standard requires certain stringent criteria to be met in order to hedge account, which, in the particular circumstances of the Group, are considered by the Board not to bring any significant economic benefit. Accordingly, the Group accounts for these derivative financial instruments at fair value through profit or loss. To the extent that instruments are hedges of future transactions, adjusted profit for the year is stated before changes in the valuation of these instruments so that the underlying performance of the Group can be more clearly seen.

# 2 Earnings per share

Basic and diluted EPS from continuing operations are based on the result for the year from continuing operations, as reported in the Group Income Statement. Basic and diluted EPS from total operations are based on the result for the year attributable to equity Shareholders of the parent. Adjusted and diluted adjusted EPS are based on adjusted profit for the year from continuing operations. The profit measures noted above are divided by the weighted average number of ordinary shares outstanding during the year, excluding shares held by the Employee Share Ownership Trust. The table below reconciles these different profit measures.

	Continuing operations £m	Discontinued operations £m	2018 total £m	Continuing operations £m	Discontinued operations £m	2017 total £m
Profit/(loss) for the year attributable to						
equity Shareholders of the parent	19.6	45.9	65.5	(25.5)	5.2	(20.3)
Adjusting items:						
Non-recurring and acquisition related items	(1.7)			1.7		
Impairment of acquired intangibles	_			33.8		
Impairment of investment in associate	_			8.0		
Share of impairment recognised by associate	2.0			_		
Impairment of capitalised development costs	_			0.7		
Impairment of capitalised software costs	_			2.2		
Amortisation of acquired intangibles	10.9			12.5		
Mark-to-market gain in respect of derivative						
financial instruments	(3.1)			(1.2)		
Income tax charge/(credit)	4.5			(8.5)		
Adjusted profit for the year from continuing operations	32.2			23.7		

The weighted average number of shares used in the calculation excludes shares held by the Employee Share Ownership Trust, as follows:

	2018 Shares million	2017 Shares million
Weighted average number of shares outstanding	57.4	57.3
Less shares held by Employee Share Ownership Trust	(0.2)	(0.2)
Weighted average number of shares used in calculation of basic earnings per share	57.2	57.1
The following table shows the effect of share options on the calculation of diluted earnings per share:		
	2018 Shares million	2017 Shares million
Weighted average number of ordinary shares per basic earnings per share calculations	57.2	57.1
Effect of shares under option	0.2	0.1
Weighted average number of ordinary shares per diluted earnings per share calculations	57.4	57.2

For the purposes of calculating diluted and diluted adjusted EPS, the weighted average number of ordinary shares is adjusted to include the weighted average number of ordinary shares that would be issued on the conversion of all potentially dilutive ordinary shares expected to vest, relating to the Company's share-based payment plans. Potential ordinary shares are only treated as dilutive when their conversion to ordinary shares would decrease EPS, or increase loss per share.

#### **3 Segment information**

The Group has ten operating segments. These operating segments have been combined into three aggregated operating segments to the extent that they have similar economic characteristics, with relevance to products and services, type and class of customer, methods of sale and distribution and the regulatory environment in which they operate. Each of these three aggregated operating segments is a reportable segment.

Following the disposal of the Industrial Analysis business and the introduction of the Horizon strategy in 2017, the Group now reports under a revised segment structure. The aggregated operating segments are as follows:

- the Materials & Characterisation segment comprises a group of businesses focusing on applied R&D and commercial customers, enabling the fabrication and characterisation of materials and devices down to the atomic scale;
- the Research & Discovery segment comprises a group of businesses providing advanced solutions that create unique environments and enable measurements down to the molecular and atomic level which are used in fundamental research; and
- the Service & Healthcare segment provides customer service and support for the Group's products and the service, sale and rental of third-party healthcare imaging systems.

The Group's internal management structure and financial reporting systems have been amended to differentiate the three aggregated operating segments on the basis of the economic characteristics discussed above. Prior year comparatives have been re-presented due to the change in the Group's segment structure.

Reportable segment results include items directly attributable to a segment as well as those which can be allocated on a reasonable basis. Inter-segment pricing is determined on an arm's length basis. The operating results of each are regularly reviewed by the Chief Operating Decision Maker, which is deemed to be the Board of Directors. Discrete financial information is available for each segment and used by the Board of Directors for decisions on resource allocation and to assess performance. No asset information is presented below as this information is not presented in reporting to the Group's Board of Directors.

#### a) Analysis by business

Results from continuing operations Year to 31 March 2018	Materials & Characterisation £m	Research & Discovery £m	Service & Healthcare £m	Total £m
External revenue	118.1	112.0	66.8	296.9
Inter-segment revenue	—	0.1	—	
Total segment revenue	118.1	112.1	66.8	
Segment adjusted operating profit from continuing operations	20.1	13.8	12.6	46.5
Results from continuing operations (re-presented) Year to 31 March 2017	Materials & Characterisation £m	Research & Discovery £m	Service & Healthcare £m	Total £m
External revenue	105.7	125.2	69.3	300.2
Inter-segment revenue	_	0.1	—	
Total segment revenue	105.7	125.3	69.3	
Segment adjusted operating profit from continuing operations	12.2	13.8	12.0	38.0

The adjusted profit after tax of £0.5m (2017: £0.8m) from the Group's associate is reported within the Research & Discovery segment.

Revenue in the Materials & Characterisation and Research & Discovery segments represents the sale of products. Revenue in the Service & Healthcare segment relates to service income, with the exception of leasing of mobile MRIs of £6.1m (2017: £9.0m) and equipment sales of £3.3m (2017: £5.6m).

year ended 31 March 2018

# **3 Segment information** continued **a) Analysis by business** continued Reconciliation of reportable segment profit

Year to 31 March 2018	Materials & Characterisation £m	Research & Discovery £m	Service & Healthcare £m	Unallocated Group items £m	Total £m
Adjusted profit for reportable segments from continuing operations	20.1	13.8	12.6	_	46.5
Restructuring costs	(0.3)	—	(0.9)	_	(1.2)
Restructuring costs – relating to associate	—	(0.4)	_	—	(0.4)
Net profit on disposal of buildings	_	_	_	3.3	3.3
Share of impairment recognised by associate	—	(2.0)	_	_	(2.0)
Amortisation of acquired intangibles	(2.5)	(7.3)	(1.1)	—	(10.9)
Fair value movement on financial derivatives	—	—	_	3.1	3.1
Financial income	—	—	_	0.3	0.3
Financial expenditure	—	—	_	(4.5)	(4.5)
Profit before income tax on continuing operations	17.3	4.1	10.6	2.2	34.2

	Materials & Characterisation	Research & Discoverv	Service & Healthcare	Unallocated Group items	Total
Year to 31 March 2017 (re-presented)	£m	£m	£m	£m	£m
Adjusted profit for reportable segments from continuing operations	12.2	13.8	12.0	_	38.0
Acquisition related costs	_	(0.3)	_	—	(0.3)
Restructuring costs	—		(0.4)	—	(0.4)
Restructuring costs – relating to associate	_	(0.4)	_	—	(0.4)
Impairment of capitalised development costs	(0.7)		—	—	(0.7)
Loss on disposal of subsidiary	_	(0.4)	_	—	(0.4)
Impairment of investment in associate	_	(8.0)	_	—	(8.0)
Impairment of capitalised software costs	_		_	(2.2)	(2.2)
Amortisation of acquired intangibles	(2.9)	(7.7)	(1.9)	—	(12.5)
Impairment of acquired intangibles	(22.6)		(11.2)	—	(33.8)
Fair value movement on financial derivatives	_		_	1.2	1.2
Financial income	—		—	0.2	0.2
Financial expenditure	_	_	_	(6.9)	(6.9)
Loss before income tax from continuing operations	(14.0)	(3.0)	(1.5)	(7.7)	(26.2)

Depreciation, capital expenditure, amortisation and impairment of intangibles and capitalised development costs arise in the following segments:

	20	2018		esented)
	Depreciation £m	Capital expenditure £m	Depreciation £m	Capital expenditure £m
Materials & Characterisation	1.5	2.8	1.6	1.7
Research & Discovery	0.8	0.8	1.0	0.7
Service & Healthcare	1.8	1.0	1.9	1.4
Unallocated Group items	0.6	0.9	0.6	0.3
Total	4.7	5.5	5.1	4.1
	2018		2017 (re-presented)	
	Amortisation and impairment £m	Capitalised development costs £m	Amortisation and impairment £m	Capitalised development costs £m
Materials & Characterisation	5.8	4.8	28.1	5.0
Research & Discovery	8.4	1.0	17.5	0.9
Service & Healthcare	1.1	_	13.2	_
Unallocated Group items	_	_	2.2	_
Total	15.3	5.8	61.0	5.9

#### b) Geographical analysis

The Group's reportable segments are located across a number of geographical locations and make sales to customers in countries across the world. The analysis below shows revenue and non-current assets (excluding deferred tax) for individual countries or regions that represent more than 5% of revenue.

Revenue from continuing operations from external customers by destination

	2018	2017
	£m	£m
USA	89.5	97.1
Rest of Europe	35.9	35.4
Rest of Asia	35.8	32.6
UK	18.1	15.3
Japan	34.9	33.9
China	49.6	53.6
Germany	24.8	23.7
Rest of World	8.3	8.6
Total 2	296.9	300.2

#### Non-current assets (excluding deferred tax)

	2018	2017
	£m	£m
UK	160.4	181.2
Germany	3.3	10.4
USA	11.3	10.3
Japan	0.5	0.6
China	0.2	0.5
Rest of Europe	9.6	15.4
Rest of Asia	—	0.1
Rest of World	1.7	2.5
Total	187.0	221.0

#### 4 Auditor's remuneration 2017 2018 £'000 £′000 Audit of these Financial Statements 140 140 Amounts received by the auditor and its associates in respect of: - Audit of Financial Statements of subsidiaries pursuant to legislation 255 281 - Taxation compliance services 14 25 - Audit related services 25 27 - Services related to corporate finance transactions 90 Total fees paid to the auditor and its associates 563 434

#### 5 Research and Development (R&D)

The total R&D spend by the Group as part of continuing operations is as follows:

	2018					
	Materials & Characterisation £m	Research & Discovery £m	Total £m	Materials & Characterisation £m	Research & Discovery £m	Total £m
R&D expense charged to the Consolidated						
Statement of Income	12.3	11.1	23.4	11.3	13.0	24.3
Less: depreciation of R&D related fixed assets	(0.1)	_	(0.1)	(0.1)	—	(0.1)
Add: amounts capitalised as fixed assets	—	0.1	0.1	0.1	0.1	0.2
Less: amortisation and impairment of R&D costs						
previously capitalised as intangibles	(3.2)	(1.2)	(4.4)	(2.6)	(1.9)	(4.5)
Add: amounts capitalised as intangible assets	4.8	1.0	5.8	5.0	0.9	5.9
Total cash spent on R&D during the year	13.8	11.0	24.8	13.7	12.1	25.8

year ended 31 March 2018

#### 6 Investment in associate

During the 2015/16 financial year, the Group entered into a strategic alliance with GD Intressenter AB of Sweden (GDI) to create the world's largest company in the highly specialised ultra-high vacuum surface science field. The alliance comprised Oxford Instruments' Omicron Nanotechnology GmbH ("Omicron") and associated subsidiaries and GDI's Scienta Scientific AB ("Scienta") and associated subsidiaries. Scienta Scientific AB is registered and has its principal place of business in Sweden.

In consideration for new shares in Scienta, Oxford Instruments transferred all of its shares in the capital of Omicron to Scienta. Oxford Instruments holds a 47% interest in the ordinary share capital of Scienta and GDI holds 53%. The investment has been accounted for as an associate taking into account the following factors:

- the Group holds substantial, but minority, voting rights (47%). All other rights are controlled by a single shareholder;
- the Group has a minority number of Non-Executive Board seats (two of five), with the remaining seats held by representatives of GDI; and
- whilst the Group has certain veto rights in respect of certain decisions, it cannot unilaterally direct the activities of the Scienta Group.

During the current year the Group invested a further £2.1m in its equity accounted associate. During the prior year the Group recognised an impairment charge of £8.0m in respect of its investment in Scienta and settled various claims totalling £0.4m relating to the disposal of its Omicron business in 2015/16.

The Group's share of loss in its equity accounted associate for the year was £1.9m (2017: £1.2m). The Group did not receive any dividends from the associate in either period.

	2018 £m	2017 £m
Carrying value at 1 April 2017	3.9	13.1
Addition	2.1	
Share of loss of associate (net of tax)	(1.9)	(1.2)
Impairment charge	—	(8.0)
Dividends received	—	
Carrying value at 31 March 2018	4.1	3.9

During the prior year, the Group recognised an impairment charge of £8.0m relating to its investment in ScientaOmicron due to the associate's financial performance for the year ended 31 December 2016 and lower projected cash flows. This resulted in a reassessment of ScientaOmicron's expected future business performance and the actions and time required to improve profitability and operational efficiency.

The £8.0m impairment was reported in the results of the Research & Discovery segment. As at 31 March 2017, the estimate of the recoverable amount of the Group's investment in ScientaOmicron, being its value in use, was calculated as £3.9m. The pre-tax discount rate used to arrive at this estimate was 15.5%. No further impairment is considered to be required as at 31 March 2018.

Summary financial information for the equity accounted associate is as follows:

	2018	2017
	£m	£m
Non-current assets	2.3	3.5
Current assets	23.7	25.0
Total assets	26.0	28.5
Current liabilities	(12.1)	(21.7)
Non-current liabilities	(9.2)	(3.6)
Total liabilities	(21.3)	(25.3)
Net assets	4.7	3.2
Income	51.0	50.8
Expenses	(55.0)	(53.3)
Loss for the year	(4.0)	(2.5)
Group's share of net assets	2.2	1.5
Group's share of loss	(1.9)	(1.2)

According to the terms of the transaction, no dividend could be paid by the associate until 27 May 2017. Following that date, any dividend paid must be agreed by both Oxford Instruments plc and GD Intressenter AB, up to a maximum of 50% of the previous year's profit after tax. At the date of signing these Financial Statements no dividend has been declared or paid.

#### 7 Disposal of subsidiary and discontinued operations

On 3 July 2017, the Group disposed of its Industrial Analysis business for a final consideration of £82.8m. On 17 November 2016, the Group disposed of its Superconducting Wire business for a final consideration of £14.0m.

#### Effect of disposal on the financial position of the Group

	Industrial Analysis 2018	Superconducting Wire 2017
	£m	£m
Goodwill	(4.3)	
Acquired intangible assets	(0.1)	—
Other intangible assets	(4.7)	—
Property, plant and equipment	(2.4)	(3.1)
Inventory	(11.5)	(12.6)
Trade and other receivables	(9.8)	(6.5)
Cash and cash equivalents	(6.0)	(0.3)
Trade and other payables	8.6	6.6
Provisions	0.8	0.1
Tax balances	(0.4)	
Net assets divested	(29.8)	(15.8)
Consideration receivable	82.8	14.0
Deferred consideration	—	(1.0)
Consideration received, satisfied in cash	82.8	13.0
Cash disposed of	(6.0)	(0.3)
Transaction expenses	(5.6)	(0.5)
Net cash inflow	71.2	12.2
Carrying value of net assets disposed of (excluding cash and cash equivalents)	(23.8)	(15.5)
Deferred consideration	—	1.0
Recognition of provision on disposal	(2.1)	(0.2)
Currency translation differences transferred from translation reserve	4.8	5.7
Gain on disposal	50.1	3.2
Tax (charge)/credit on gain on disposal	(2.3)	0.9
Gain on disposal net of tax	47.8	4.1

The recognition of provisions on disposal primarily relate to onerous lease contracts. These have been recognised in the Income Statement under discontinued operations.

#### **Discontinued operations**

In the year to 31 March 2018 the Group's Industrial Analysis business was classified as a discontinued operation; and in the year to 31 March 2017 the Group's Superconducting Wire business was classified as a discontinued operation. They were considered major classes of business on the basis that they were previously operating segments and referred to in the Group Strategic Report.

The 2017 Financial Statements have been re-presented to reflect the classification of the Group's Industrial Analysis business as a discontinued operation.

year ended 31 March 2018

#### 7 Disposal of subsidiary and discontinued operations continued

Discontinued operations continued

Results of discontinued operations – year to 31 March 2018

	Industrial
	Analysis
	£m
Revenue	16.8
Expenses	(16.3)
Adjusted profit before tax	0.5
Income tax charge	(0.9)
Adjusted profit after tax	(0.4)
Adjusting items:	
Amortisation of acquired intangibles	(0.1)
On-off costs arising as a result of disposal	(2.2)
Income tax on adjusting items	0.8
Loss after tax	(1.9)
Gain on disposal	50.1
Tax on gain on disposal	(2.3)
Profit from discontinued operations after tax	45.9

Industrial

#### Results of discontinued operations – year to 31 March 2017

Results of discontinued operations – year to 31 March 2017	Industrial Analysis £m	Superconducting Wire £m	Austin Scientific £m	Total £m
Revenue	48.3	22.2	—	70.5
Expenses	(43.8)	(20.9)	(0.2)	(64.9)
Adjusted profit/(loss) before tax	4.5	1.3	(0.2)	5.6
Income tax charge	(0.9)	(0.4)	_	(1.3)
Adjusted profit/(loss) after tax	3.6	0.9	(0.2)	4.3
Adjusting items:				
Amortisation and impairment of acquired intangibles	(2.4)	—	—	(2.4)
Acquisition related costs	(1.2)	—	—	(1.2)
Restructuring costs	(0.2)	—	—	(0.2)
Income tax on adjusting items	0.6		—	0.6
Profit/(loss) after tax	0.4	0.9	(0.2)	1.1
Gain on disposal	_	3.2	_	3.2
Tax on gain on disposal	—	0.9	_	0.9
Profit/(loss) from discontinued operations after tax	0.4	5.0	(0.2)	5.2
Earnings per share from discontinued operations			2018 pence	2017 pence
Adjusted basic (loss)/earnings per share			(0.7)	7.5
Adjusted diluted (loss)/earnings per share			(0.7)	7.5
Total basic earnings per share			80.2	9.1
Total diluted earnings per share			80.0	9.1
Cash flows from discontinued operations				
			2018 £m	2017 £m
Net cash generated from operating activities			3.0	6.1
Net cash generated from/(used in) investing activities			71.2	(9.7)
Net cash used in financing activities			_	

8 Financial income		
	2018	2017
	fm	£m
Interest receivable	0.3	0.2
	0.3	0.2

#### 9 Financial expenditure

	2018	2017
	£m	£m
Interest payable	3.9	5.6
Interest charge on pension scheme net liabilities	0.6	1.1
Unwind of discount on contingent consideration	—	0.2
	4.5	6.9

10 Personnel costs		
	2018	2017
	£m	£m
Wages and salaries	82.5	98.7
Social security costs	9.7	10.8
Contributions to defined contribution pension plans	3.3	4.3
Charge in respect of employee share options	1.1	0.5
	96.6	114.3

Directors' emoluments are disclosed in the Remuneration Report on pages 67 to 80 of this Report and Financial Statements.

Included in the total above is £4.6m (2017: £21.4m) relating to discontinued operations.

#### **11 Employees**

The average number of people employed by the Group (including Directors and temporary employees) during the year was as follows:

	2018	2017
	Number	Number
Production	592	797
Sales and marketing	431	488
Research and Development	375	410
Administration and shared services	244	279
Total average number of employees	1,642	1,974

#### 12 Share option schemes

The Group operates three share option schemes:

#### All-employee Share Incentive Plan (SIP)

All UK employees are eligible to participate in the Group's HM Revenue and Customs-approved SIP. Participating employees make a cash contribution to the plan each month. The Group contributes a further amount equal to 20% of the employee's contribution. Independent trustees then purchase matching shares in the market on behalf of the employees. The matching shares vest on the completion by the participating employee of a further three years' service and can be withdrawn from the plan tax-free after five years' service.

#### **Executive Share Option Scheme (ESO)**

Options awarded under the Executive Share Option Scheme are made annually to certain senior managers. The exercise prices are determined according to the mid-market closing share price on the day before the date of grant. Options have a life of ten years and a vesting period of three years.

#### Medium-Term Incentive Plan Scheme (MTIP)

Options awarded under the Medium-Term Incentive Plan are made annually to certain senior managers. The exercise prices are finil. Options have a life of ten years and a vesting period of three years.

year ended 31 March 2018

#### 12 Share option schemes continued

#### Senior Executive Long-Term Incentive Scheme (SELTIS)

Options awarded under the Senior Executive Long-Term Incentive Scheme are made annually to certain senior managers. The exercise prices are fnil. Options have a life of seven years and a vesting period of three years.

The Executive Share Option Scheme, Medium-Term Incentive Plan Scheme and Senior Executive Long-Term Incentive Scheme are subject to performance conditions which can be found in the Remuneration Report on pages 67 to 80.

#### Performance Share Plan Scheme (PSP)

Under the Performance Share Plan awards of performance shares (or nil-cost options) are made annually to certain senior managers. Awards have a life of ten years with vesting subject to achievement of performance targets and a vesting period of a minimum of three years (but may be up to five years).

Administrative expenses include a charge of £1.1m (2017: £0.5m) in respect of the cost of providing share-based remuneration. The cost of share options is calculated by estimating the fair value of the option at grant date and spreading that amount over the vesting period after adjusting for an expectation of non-vesting.

Fair values are determined using an internal valuation model based on a modified Black-Scholes model. Expected volatility has been based on historical volatility over a period of time of the same length as the expected option life and ending on the grant date. Half of the ESO options issued before 2009, half of the PSP options and all SELTIS options use total shareholder return (TSR) as a performance condition. As TSR is a market-based performance condition, the accounting treatment differs from that for options subject to non-market performance conditions. This means that the TSR performance conditions have been incorporated into the calculation of the fair value as a discount in calculating the fair value.

For options granted in the years ended 31 March 2018 and 2017, the fair value per option granted and the assumptions used in the calculation are as follows:

	Medium-Term Incentive Plan Scheme September 2017	Performance Share Plan Scheme September 2017	Executive Share Option Scheme November 2016	Performance Share Plan Scheme June 2016	Executive Share Option Scheme June 2016
Fair value at measurement date	£3.38	£2.96	£2.02	£4.92	£2.54
Share price at grant date	£9.59	£9.59	£6.23	£7.38	£7.38
Exercise price	£nil	£nil	£6.23	£nil	£7.38
Expected volatility	41.8%	48.6%	41.8%	36.9%	42.7%
Expected option life					
(expressed as weighted average life used in the modelling)	6 years	3 years	6 years	3 years	6 years
Expected dividend yield	1.4%	1.4%	2.1%	1.8%	1.8%
Risk-free interest rate	0.9%	0.9%	0.7%	0.5%	0.9%

The	options	existing	at the	year	end	were	as	follows:
-----	---------	----------	--------	------	-----	------	----	----------

	2018			2017
	Number	Exercise		Number
	of shares	price	Period when exercisable	of shares
Options subsisting at the year end on unissued ordinary shares:				
Executive Share Option Schemes				
September 2007	—	£2.32	28/08/10 - 27/09/17	6,000
December 2008	7,500	£1.35	16/12/11 – 15/12/18	8,339
December 2009	3,500	£2.04	17/12/12 – 16/12/19	11,000
January 2011	35,126	£7.05	07/01/14 - 06/01/21	82,675
December 2011	140,250	£9.90	14/12/14 – 13/12/21	169,650
June 2015	454,588	£10.28	15/06/18 – 14/06/25	536,362
June 2016	36,000	£7.38	21/06/19 – 20/06/26	36,000
November 2016	158,321	£6.27	29/11/19 – 28/11/26	163,321
Total options subsisting on existing ordinary shares	835,285			1,013,347
Percentage of issued share capital	1.5%			1.8%
Medium-Term Incentive Plan				
September 2017	116,542	£nil	25/09/20 - 24/09/27	_
Total options subsisting on existing ordinary shares	116,542			
Percentage of issued share capital	0.2%			0.0%
Performance Share Plan				
June 2016	148,475	£nil	21/06/19 – 20/06/26	148,475
September 2017	116,853	£nil	25/09/20 - 24/09/27	_
Total options subsisting on existing ordinary shares	265,328			148,475
Percentage of issued share capital	0.5%			0.3%
Options subsisting at the year end on existing ordinary shares held in tr	ust:			

#### Senior Executive Long-Term Incentive Scheme

January 2011	_	£nil	07/01/14 – 06/01/18	15,500
Total options subsisting on existing ordinary shares held in trust	_			15,500
Percentage of issued share capital	0.0%			0.0%

The number and weighted average exercise prices of those options are as follows:

	2018		201	7	
	Weighted average exercise price	Number of options	Weighted average exercise price	Number of options	
Outstanding at the beginning of the period	£7.91	1,177,322	£9.25	1,798,046	
Granted during the year	£nil	233,395	£3.69	347,796	
Forfeited during the year	£9.35	(21,600)	£6.40	(574,883)	
Exercised during the year	£4.37	(59,688)	£3.55	(17,005)	
Lapsed during the year	£9.49	(112,274)	£12.92	(376,632)	
Outstanding at the year end	£7.69	1,217,155	£7.91	1,177,322	
Exercisable at the year end	£8.87	186,376	£7.88	293,164	

The weighted average share price at the time of exercise of the options was £10.17 (2017: £7.75).

year ended 31 March 2018

#### 13 Income tax expense

	2018 £m	2017 £m
Current tax expense		
Current year	7.3	6.2
Adjustment in respect of prior years	(1.7)	(2.2)
	5.6	4.0
Deferred tax expense		
Origination and reversal of temporary differences	7.3	(5.6)
Adjustment in respect of prior years	1.7	0.9
	9.0	(4.7)
Total tax expense/(credit)	14.6	(0.7)
Reconciliation of effective tax rate		
Profit/(loss) before income tax	34.2	(26.2)
Income tax using the weighted average statutory tax rate of 22% (2017: 22%)	7.5	(5.8)
Effect of:		
Tax rates other than the weighted average statutory rate	0.3	(0.5)
Change in rate at which deferred tax recognised	5.3	(0.2)
Transaction costs, deferred consideration and impairments not deductible for tax	1.2	5.6
Non-taxable income and expenses	—	1.4
Tax incentives not recognised in the Consolidated Statement of Income	(0.7)	(0.4)
Current period losses not available for carry forward	0.4	_
Movement in unrecognised deferred tax	0.6	0.6
Adjustment in respect of prior years	—	(1.4)
Total tax expense/(credit)	14.6	(0.7)
Taxation charge recognised in other comprehensive income		
Deferred tax – relating to employee benefits	0.9	0.9
	0.9	0.9

Deferred tax – relating to share options

Reductions in the UK corporation tax rate from 20% to 19% (effective from 1 April 2017) and to 18% (effective from 1 April 2020) were substantively enacted on 26 October 2015, and an additional reduction to 17% (effective from 1 April 2020) was substantively enacted on 6 September 2016. This will reduce the Company's future current tax charge accordingly. The UK deferred tax liability at 31 March 2018 has been calculated based on those rates. The Group carries tax provisions in relation to uncertain tax positions arising from the possible outcome of negotiations with tax authorities. Such provisions are a reflection of the geographical spread of the Group's operations and the variety of jurisdictions in which it carries out its activities.

Effective 1 January 2018 the rate of federal tax in the US was reduced from 35% to 21% and, as a result, deferred tax assets were reduced by £5.4m. The Group currently expects that on an ongoing basis the effective tax rate will be reduced by between 1% and 2% because of this rate reduction.

The current tax liability payable includes a provision of  $\pm 3.4$ m for uncertain tax positions. The liability includes an amount of  $\pm 2.9$ m in respect of the Group's financing structure. The range of possible outcomes is between  $\pm 1.1$  and  $\pm 5.1$ m. It is possible that if the outcome is different to that estimated by management there could be a material effect on the Financial Statements in the next twelve months.

In October 2017, the EU Commission opened a formal State Aid investigation into an exemption within the UK's current Controlled Foreign Company (CFC) regime (introduced in 2013) for certain finance income. The investigation is ongoing, but if the Commission ultimately concludes that the provisions do constitute State Aid then they would require the UK to recover any such aid from affected parties. The Group has claimed the benefit of this exemption, and therefore may be adversely affected by the outcome of the investigation. If the Commission were to conclude that the finance exemption with the UK's CFC regime constitutes State Aid and no other exemptions were available to the Group then, as at 31 March 2018, an additional liability of £1.7m in respect of tax and £0.1m in respect of interest would arise unless such a decision could be successfully challenged in the EU Courts. However, no provision has been made in respect of this investigation since we believe that it is more likely than not that no additional tax will ultimately be due.

#### 14 Dividends per share

The following dividends per share were paid by the Group:

	2018	2017
	pence	pence
Previous year interim dividend	3.7	3.7
Previous year final dividend	9.3	9.3
	13.0	13.0

The following dividends per share were proposed by the Group in respect of each accounting year presented:

	2018	2017
	pence	pence
Interim dividend	3.7	3.7
Final dividend	9.6	9.3
	13.3	13.0

The interim dividend was not provided for at the year end and was paid on 6 April 2018. The final proposed dividend of 9.6 pence per share (2017: 9.3 pence) was not provided at the year end and will be paid on 19 October 2018 subject to authorisation by the Shareholders at the forthcoming Annual General Meeting.

#### 15 Property, plant and equipment

	Land and buildings	Plant and equipment	Fixtures and fittings	Total
	fm	£m	£m	£m
Cost				
Balance at 1 April 2016	25.2	56.9	10.0	92.1
Additions – other	0.3	3.8	0.5	4.6
Disposals	—	(10.7)	(0.1)	(10.8)
Effect of movements in foreign exchange rates	1.5	3.7	0.2	5.4
Balance at 31 March 2017	27.0	53.7	10.6	91.3
Balance at 1 April 2017	27.0	53.7	10.6	91.3
Additions – other	0.1	4.5	0.4	5.0
Disposals	(12.0)	(10.9)	(1.0)	(23.9)
Transfer to intangibles	_	(0.6)	_	(0.6)
Effect of movements in foreign exchange rates	(0.5)	(1.4)	(0.1)	(2.0)
Balance at 31 March 2018	14.6	45.3	9.9	69.8
Depreciation and impairment losses				
Balance at 1 April 2016	8.1	41.2	7.6	56.9
Depreciation charge for the year	0.7	4.9	0.5	6.1
Disposals	_	(7.0)	(0.1)	(7.1)
Effect of movements in foreign exchange rates	0.7	2.1	0.1	2.9
Balance at 31 March 2017	9.5	41.2	8.1	58.8
Balance at 1 April 2017	9.5	41.2	8.1	58.8
Depreciation charge for the year	0.5	3.8	0.4	4.7
Disposals	(4.8)	(9.6)	(0.7)	(15.1)
Effect of movements in foreign exchange rates	(0.5)	(1.0)	0.1	(1.4)
Balance at 31 March 2018	4.7	34.4	7.9	47.0
Carrying amounts				
At 1 April 2016	17.1	15.7	2.4	35.2
At 31 March 2017 and 1 April 2017	17.5	12.5	2.5	32.5
At 31 March 2018	9.9	10.9	2.0	22.8

At 31 March 2018, the net book value of plant and equipment included £0.9m (2017: £0.3m) of assets under construction and £3.2m (2017: £4.6m) of assets subject to operating leases.

Included in the depreciation charge for the year is finil (2017: f1.0m) relating to discontinued operations.

year ended 31 March 2018

#### **16 Intangible assets**

To intaligible assets							
	Goodwill £m	Customer related acquired intangibles £m	Technology related acquired intangibles £m	Development costs acquired intangibles £m	Development costs internally generated £m	Software £m	Total £m
Cost	LIII	LIII	LIII	LIII	LIII	LIII	
Balance at 1 April 2017	111.2	51.4	112.0	1.8	56.8	2.1	335.3
Additions – internally generated	111.2	51.4	112.0	1.0	7.8	0.1	7.9
Effect of movements in foreign exchange rates	3.3	5.2	6.5		1.7		16.7
Balance at 31 March 2017	114.5	56.6	118.5	1.8	66.3	2.2	359.9
Balance at 1 April 2017	114.5	56.6	118.5	1.8	66.3	2.2	359.9
Additions – internally generated	114.5	50.0	110.5	1.0	6.1	0.5	6.6
Disposals	(5.6)	(3.7)	(24.0)	_	(26.4)	0.5	(59.7)
Transfer from PPE	(5.0)	(3.7)	(24.0)	_	(20.4)	0.6	(59.7)
Effect of movements in	_		_		_	0.0	0.0
foreign exchange rates	(1.8)	(4.0)	(3.5)	_	(0.2)	_	(9.5)
Balance at 31 March 2018	107.1	48.9	91.0	1.8	45.8	3.3	297.9
Amortisation and impairment losses	107.1	40.5	91.0	1.0	45.0	5.5	237.3
Balance at 1 April 2016	1.1	29.8	44.1	0.4	39.1		114.5
	1.1						114.5
Amortisation charge for the year	28.8	3.6 5.0	10.0 1.1	0.2	4.8 0.7	2.2	37.8
Impairment charge for the year					0.7	2.2	
Effect of movements in foreign exchange rates	0.1	3.5	3.0				8.0
Balance at 31 March 2017	30.0	41.9	58.2	0.6	46.0	2.2	178.9
Balance at 1 April 2017	30.0	41.9	58.2	0.6	46.0	2.2	178.9
Amortisation charge for the year	—	2.7	8.0	0.1	3.5	0.1	14.4
Impairment charge for the year	_		_	—	3.2	—	3.2
Disposals	(1.2)	(3.7)	(24.0)		(21.8)	—	(50.7)
Effect of movements in	(2.0)						
foreign exchange rates	(2.0)	(3.3)	(1.1)		(0.2)		(6.6)
Balance at 31 March 2018	26.8	37.6	41.1	0.7	30.7	2.3	139.2
Carrying amounts							
At 1 April 2016	110.1	21.6	67.9	1.4	17.7	2.1	220.8
At 31 March 2017 and 1 April 2017	84.5	14.7	60.3	1.2	20.3		181.0
At 31 March 2018	80.3	11.3	49.9	1.1	15.1	1.0	158.7

The following intangible assets are considered material by the Directors as they represent 91% (2017: 88%) of total acquired intangible assets:

	2018			2017
	£m	Amortisation period Years	Remaining amortisation period Years	£m
Trademarks – Andor	8.7	15.0	10.8	9.7
Technology, know-how and patents – Andor:				
– Product related	33.1	12.0	7.8	37.6
– Software related	6.0	10.0	5.8	7.7
Technology, know-how and patents – Asylum	9.1	12.0	6.7	11.7

Goodwill acquired in a business combination is allocated, at acquisition, to the cash generating units (CGUs) that are expected to benefit from that business combination. The carrying amount of goodwill was allocated to individual CGUs as follows:

	2018	2017
	£m	£m
Materials & Characterisation		
NanoAnalysis	10.0	9.9
Research & Discovery		
Andor	61.2	61.4
NanoScience	6.8	6.7
Magnetic Resonance	2.3	2.3
Other		
Industrial Analysis	_	4.2
	80.3	84.5

The Group tests goodwill annually for impairment, or more frequently if there are indications that goodwill might be impaired.

Accounting standards require an impairment test to be carried out by determining the recoverable amount of each CGU which contains goodwill. The recoverable amount is calculated as the higher of the fair value less costs to sell or the value in use of the CGU. In the Group's case the recoverable amount is based on value-in-use calculations. Value in use is calculated by discounting expected future cash flows and in particular (except as noted below) Board-approved five-year cash flow forecasts, prepared by the management of each CGU, are used together with 3% per annum growth for the subsequent 20 years. These rates are considered to be at or below long-term market trends for the Group's businesses.

During the year the Group made impairments in respect of intangible assets as follows:

- £1.4m in respect of a development project which has experienced delays and cost overruns; and
- £1.8m in respect of a development project that was discontinued as a result of the sale of the Industrial Analysis division.

During the year an R&D project in the Materials & Characterisation segment fell significantly behind the original development timetable with costs being ahead of budget. On review, management felt that some of the early work on the project had brought no value and those early costs of £1.4m have consequently been derecognised as an intangible asset. A review was undertaken and a remediation plan put in place. The remainder of the project is still considered to have commercial value.

The £1.8m impairment of capitalised development costs relate to an entire project that was discontinued as a result of the sale of the Industrial Analysis division. The impaired capitalised development costs were held in the Research & Development segment.

During the prior year the Group made impairments in respect of intangible assets as follows:

- £22.6m in respect of the goodwill of the Asylum CGU;
- £6.2m in respect of the goodwill of the OI Healthcare CGU;
- £5.0m in respect of customer relationships which arose on the acquisition of MIR in 2015;
- £2.2m in respect of bespoke software development;
- £1.1m in respect of a technology related acquired intangible which was superseded by a new product; and
- £0.7m in respect of a development project which was stopped in order to allow the Group to focus and direct resources so as to accelerate key projects.

During the prior year the financial performance of the Group's Asylum CGU deteriorated, with the business performing below expectations. Performance was impacted by a slowdown in academic funding in US and European markets, resulting in a contraction of the overall scanning probe microscopy market, compounded by delays in new product launches. The Group revised its financial projections for the business and planned launch dates for new products in light of the trading environment.

The financial performance of the Group's Healthcare business also deteriorated in the US during the prior year, with business operating profit falling significantly from its previous levels. Performance was impacted by a lower level of sales of refurbished imaging systems compared to previous years, which is expected to continue. This was driven by both a particularly high level of activity during 2015/16 but also a change in software licensing policy by one of the large original equipment manufacturers. The Group has revised its financial projections for the business, consistent with a new strategy and the actions and time required to improve profitability and operational efficiency.

The Asylum and OI Healthcare CGUs are business operations and the goodwill and acquired intangible assets relating to each are held in the Materials & Characterisation and Service & Healthcare segments respectively. As at 31 March 2018, the estimates of the recoverable amounts of the Asylum and OI Healthcare CGUs, being their value in use, were calculated as £16.0m and £9.0m respectively. The discount rates used in arriving at these estimates were 13.2% for Asylum and 15.5% for OI Healthcare. At the year end, the Goodwill balance held by the Group relating to the Asylum and OI Healthcare CGUs was £nil (2017: £nil). The Group did not consider there to be any indicators of impairment and therefore no further impairment testing was performed as at 31 March 2018.

year ended 31 March 2018

#### 16 Intangible assets continued

In the prior year in respect of the impairment tests for Asylum and OI Healthcare, specific forecasts were prepared for the purpose of the impairment test taking into account the latest available information regarding business and market conditions.

The £2.2m impairment of software costs in the prior year represented inefficient capitalised costs relating to the Group's new ERP system and was reported as part of unallocated central costs in the segmental disclosure. The £1.1m impairment of technology related acquired intangible assets in the prior year represented the write down of intellectual property obtained as part of a previous acquisition that had since been superseded by a new product. The asset belonged to the now disposed of Industrial Analysis business.

The £0.7m impairment of capitalised development costs arose in the prior year as a result of the termination of a specific project that was stopped in order to focus and direct resources so as to accelerate key projects. The impaired capitalised development costs were held in the Materials & Characterisation segment.

#### **Key assumptions**

The key assumptions are those regarding discount rates and growth rates.

The growth rates are based on industry growth factors. Changes in selling prices and direct costs are based on past practices and expectations of future changes in the market.

The pre-tax weighted average costs of capital used for Materials & Characterisation and Research & Discovery in impairment testing are 14.1% (2017: 13.2%-13.6%) and 14.1%-14.9% (2017: 12.4%-13.4%) respectively in line with the risk associated with each of the business segments. The 2017 pre-tax weighted average cost of capital used for the Service & Healthcare impairment testing was 15.5%. No 2018 impairment testing has been performed because the Service & Healthcare segment does not hold any goodwill. Management has estimated these discount rates by reference to past experience and an industry average weighted cost of capital as adjusted for appropriate risk factors reflecting current economic circumstances and the risk profiles of each CGU.

#### Sensitivity analysis

The Group's estimate of impairments are most sensitive to changes in the discount rate and forecast growth rate. Sensitivity analysis has been carried out by reference to both of these assumptions. This demonstrated that a 359 basis point increase in the discount rate would be required in order to eliminate current headroom of £37.7m and result in an impairment in the Andor business. Similarly, a reduction in the growth rate to nil would be required in order to result in an impairment in the Andor business.

#### 17 Deferred tax

Movements in deferred tax assets and liabilities were as follows:

	Property, plant and		Employee	Intangible			
	equipment	Inventory	benefits	assets	Tax losses	Other	Total
	£m	£m	£m	£m	£m	£m	£m
Balance at 31 March 2016	0.6	3.3	8.6	(8.1)	4.1	4.8	13.3
Reclassification							
Recognised in income	0.4	(0.7)	(1.0)	7.1	0.6	(0.8)	5.6
Recognised in other comprehensive income	—	—	(0.9)	—	—		(0.9)
Recognised directly in equity	—	—	—	—	—		—
Acquisitions	—	—	—		—		
Disposals	—	—	—		—		
Foreign exchange	(0.1)	0.4	0.4	0.9	0.3	0.5	2.4
Balance at 31 March 2017	0.9	3.0	7.1	(0.1)	5.0	4.5	20.4
Reclassification							
Recognised in income	0.7	(0.6)	(1.7)	(4.8)	(1.9)	(0.7)	(9.0)
Recognised in other comprehensive income	—	—	(0.9)	—	—	—	(0.9)
Recognised directly in equity	—	—	—	—	—	—	—
Acquisitions	—	—	—	_	—	—	_
Disposals	(0.2)	(0.6)	(0.3)	0.7	(0.5)	(0.8)	(1.7)
Foreign exchange	_	(0.2)	(0.2)	(0.9)	0.1	(0.3)	(1.5)
Balance at 31 March 2018	1.4	1.6	4.0	(5.1)	2.7	2.7	7.3

53.9

45.9

Certain deferred tax assets and liabilities have been offset as follows:

	Assets		Liabilities		Net	
	2018 £m	2017 £m	2018 £m	2017 £m	2018 £m	2017 £m
Gross assets/(liabilities)	18.7	33.4	(11.4)	(13.0)	7.3	20.4
Offset	(5.3)	(7.4)	5.3	7.4	—	_
Net assets/(liabilities)	13.4	26.0	(6.1)	(5.6)	7.3	20.4

Deferred tax assets have not been recognised in respect of the following items:

	2018 £m	2017 £m
Deductible temporary differences	12.6	1.7
Tax losses	3.5	9.8
	16.1	11.5

The tax losses and the deductible temporary differences do not expire under current tax legislation. Deferred tax assets have not been recognised in respect of these items as it is not probable that future taxable profits will be available in the subsidiaries concerned against which the Group can utilise the brought forward tax losses.

No deferred tax liability has been recognised in respect of £74.6m (2017: £25.7m) of undistributed earnings of overseas subsidiaries since the majority of such distributions would not be taxable. In other cases the Group considers that it is able to control the timing of remittances so that any tax is not expected to arise in the foreseeable future.

18 Inventories		
	2018 £m	2017 £m
Raw materials and consumables	17.1	19.5
Work in progress	14.8	14.5
Finished goods	14.0	19.9

The amount of inventory recognised as an expense was £128.7m (2017: £125.6m). In the ordinary course of business, the Group makes impairment provisions for slow-moving, excess and obsolete inventory as appropriate. Inventory is stated after charging impairments of £0.4m in the current period (2017: £0.4m). In the current year, £nil (2017: £0.2m) was reversed relating to previous impairments. Impairments are included within gross profit.

Inventory carried at net realisable value is £0.6m (2017: fnil).

#### 19 Trade and other receivables

	2018	2017
	£m	£m
Trade receivables	62.8	73.0
Less provision for impairment of receivables	(1.4)	(2.4)
Net trade receivables	61.4	70.6
Prepayments	3.7	2.9
Accrued income	2.3	2.4
Other receivables	5.9	5.2
	73.3	81.1

Trade receivables are non-interest-bearing. Standard credit terms provided to customers differ according to business and country and are typically between 30 and 60 days.

Other receivables includes £1.2m (2017: fnil) due from the Group's associated undertaking.

year ended 31 March 2018

#### 19 Trade and other receivables continued

The maximum exposure to credit risk for trade and other receivables by geographic region was:

	2018	2017
	£m	£m
UK	8.5	9.0
China	14.0	11.4
Japan	9.6	11.7
USA	14.9	18.6
Germany	3.5	1.8
Rest of Europe	12.1	16.3
Rest of Asia	6.1	10.3
Rest of World	2.3	2.7
Total	71.0	81.8
The ageing of financial assets comprising net trade receivables and other receivables at the reporting date was:		
The ageing of manetal abets comprising net adde receivables and other receivables at the reporting date was.	2018	2017
	2018 £m	£m
Current (not overdue)	46.9	61.1
Less than 31 days overdue	12.6	9.8
More than 30 days but less than 91 days overdue	7.2	6.5
More than 90 days overdue	4.3	4.4
	71.0	81.8

In both periods presented the entire provision against trade receivables relates to balances more than 90 days overdue.

The movement in the allowance for impairment of trade receivables during the year was as follows:

	2018	2017
	£m	£m
Balance at start of year	2.4	2.0
(Decrease)/increase in allowance	(1.0)	0.4
Balance at end of year	1.4	2.4

Valuation allowances are used to record provisions for credit losses. The valuation allowance is reduced and the asset impaired when the customer is in liquidation.

Long-term receivables of £1.4m (2017: £3.6m) relate to amounts due from the Group's associated undertaking.

#### 20 Cash and cash equivalents

	2018	2017
	£m	£m
Cash balances	20.7	27.2
Bank overdraft	_	(0.7)
Cash and cash equivalents in the Consolidated Statement of Cash Flows	20.7	26.5

All cash and cash equivalents are available for use by the Group.

#### 21 Financial risk management

The Group's multinational operations and debt financing expose it to a variety of financial risks. In the course of its business, the Group is exposed to foreign currency risk, interest rate risk, liquidity risk, commodity risk and credit risk. Financial risk management policies are set by the Board of Directors. These policies are implemented by a central treasury function that has formal procedures to manage foreign exchange risk, interest rate risk and liquidity risk, including, where appropriate, the use of derivative financial instruments. Commodity risk is managed locally by the operating businesses. The Group has clearly defined authority and approval limits.

In accordance with its treasury policy, the Group does not hold or use derivative financial instruments for trading or speculative purposes. Such instruments are only used to manage the risks arising from operating or financial assets or liabilities or highly probable future transactions.

The Group uses derivative financial instruments to hedge its exposure to fluctuations in foreign exchange rates, interest rates and certain commodity prices.

In common with a number of other companies, the Group has decided that the additional costs of meeting the extensive documentation requirements of IAS 39 to apply hedge accounting to derivative financial instruments used for hedging exposure to foreign currency and interest rate volatility cannot be justified. Accordingly, the Group does not use hedge accounting for such derivatives.

#### Foreign currency risk

Foreign currency risk arises both where sale or purchase transactions are undertaken in currencies other than the respective functional currencies of Group companies (transactional exposures) and where the results of overseas companies are consolidated into the Group's reporting currency of Sterling (translational exposures). The Group has operations around the world which record their results in a variety of different local functional currencies. In countries where the Group does not have operations, it invariably has some customers or suppliers that transact in a foreign currency. The Group is therefore exposed to the changes in foreign currency exchange rates between a number of different currencies but the Group's primary exposures relate to the US Dollar, the Euro and the Japanese Yen. To reduce uncertainty, the Group maintains a rolling hedge of forward contracts equivalent of to 75% (2017: 75%) of the exposure expected to arise over the following twelve months. The remaining 25% is sold on the spot market. The fair value of outstanding currency contracts recognised as a liability as at 31 March 2018 amount to £0.4m (2017: £5.0m) and those recognised as an asset amount to £2.4m (2017: £0.6m).

Movements in the fair value of derivative financial instruments are recognised in the Consolidated Statement of Income immediately. However, in order to facilitate a more meaningful comparison of the Group's performance year-on-year the elements of these movements that relate to hedges in respect of future sales are treated as an adjusting item in the calculation of adjusted earnings (Note 1).

The Group's translational exposures to foreign currency risks can relate both to the Consolidated Statement of Income and net assets of overseas subsidiaries. The Group's policy is not to hedge the translational exposure that arises on consolidation of the Consolidated Statements of Income of overseas subsidiaries.

#### Interest rate risk

Interest rate risk comprises both the interest rate price risk that results from borrowing at fixed rates of interest and also the interest cash flow risk that results from borrowing at variable rates. The Group's policy is to use a mixture of revolving short and medium-term floating rate debt underpinned by longer-term fixed rate debt. The short and medium-term floating rate debt provides flexibility to reduce debt levels as appropriate. The longer-term fixed rate debt provides stability and cost certainty to the Group's financing structure.

#### Liquidity risk

Liquidity risk represents the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing this risk is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation. The Group manages this risk by maintaining adequate committed lines of funding from high quality lenders. The facilities committed to the Group as at 31 March 2018 are set out in Note 24.

#### **Credit risk**

Credit risk arises because a counterparty may fail to perform its obligations. The Group is exposed to credit risk on financial assets such as cash balances, derivative financial instruments, trade and other receivables. The Group's credit risk is primarily attributable to its trade receivables and cash balances. The amounts recognised in the Consolidated Statement of Financial Position are net of appropriate allowances for doubtful receivables, estimated by the Group's management based on prior experience and their assessment of the current economic environment. Trade receivables are subject to credit limits and control and approval procedures in the operating companies.

Due to its large geographic base and number of customers, the Group is not exposed to material concentrations of credit risk on its trade receivables. Credit risk associated with cash balances and derivative financial instruments is managed by transacting with financial institutions with high quality credit ratings. In particular, a Board-approved policy sets out guidelines for which categories of institutions may be used and the maximum amount which may be invested with each institution within a particular category. Accordingly, the Group's associated credit risk is limited. The Group has no significant concentration of credit risk. The Group's maximum exposure to credit risk is represented by the carrying amount of each financial asset, including derivative financial instruments, in the Group Consolidated Statement of Financial Position.

#### Exposure to credit risk

The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit risk at 31 March 2018 was £94.1m (2017: £109.6m).

	2018	2017
	£m	£m
Long-term receivables	1.4	3.6
Trade receivables	61.4	70.6
Other receivables	8.2	7.6
Cash and cash equivalents	20.7	27.2
Forward exchange contracts	2.4	0.6
	94.1	109.6

The maximum exposure to credit risk for trade receivables is discussed in Note 19.

Other receivables include £2.9m (2017: £2.8m) in respect of VAT and similar taxes which are not past due date.

year ended 31 March 2018

#### 21 Financial risk management continued

#### **Capital management**

The Board considers capital to comprise share capital, reserves and the net cash or net debt position of the Company. The Company was in a net debt position at the year end. Total capital at the end of the current year totalled £199.3m (2017: £241.8m).

The Board's long-term objective is to have an efficient capital structure by maintaining a balance between the higher returns that might be possible with higher levels of borrowings and the advantages and security afforded by a sound capital position. This is monitored by reference to the ratio of net debt to earnings before interest, tax, depreciation and amortisation (EBITDA) and the Board has set itself internal limits, which are well inside any covenants the Group has with lenders. The Group maintains the right to purchase its own shares in the market; the timing of these purchases would depend on market prices. Buy and sell decisions are made on a specific transaction basis by the Board.

Each year the Board carefully considers the appropriate level of dividend payments. In doing this, the Board looks to increase dividends in line with underlying earnings, although the Board will also take into account other considerations in their decision making process. The Board does not have a policy to pay a fixed dividend yield or to maintain a fixed rate of dividend cover, but assesses both of these metrics in line with sustained earnings growth.

As set out in the Chief Executive's Statement, the Group will actively manage its portfolio of businesses and products, selecting those markets with long-term growth drivers where we can maintain or grow leading positions. We will focus on those markets where nanotechnology has the potential to address some of the world's most complex and pressing challenges and where we can deliver unique solutions and service excellence. In line with the objective of maintaining a balance between borrowings and equity, the Group would seek to finance organic growth (e.g. through investment in Research and Development) and smaller "bolt-on" acquisitions from operating cash flow, thus maintaining balance sheet efficiency. Larger acquisitions would be financed either by equity or a mixture of equity and debt so as to ensure the Group has a manageable ratio of net debt to EBITDA.

The Board encourages employees to hold shares in the Company. As well as various share option plans (full details of which are given in Note 12), from April 2008 all UK employees have been offered the opportunity to take part in a Share Incentive Plan (SIP). Under this plan, employees are able to invest up to £1,500 each tax year in shares in the Company. The Company awards one additional free share (a matching share) for every five shares bought by each employee.

There were no changes to the Group's approach to capital management during the year. Neither the Company nor any of its subsidiaries are subject to externally imposed capital requirements.

#### **22 Financial instruments**

#### Fair values of financial assets and liabilities

The fair values of financial assets and liabilities together with the carrying amounts shown in the Consolidated Statement of Financial Position are as follows:

		2018	2018		2017	
	Fair value hierarchy	Carrying amount £m	Fair value £m	Carrying amount £m	Fair value £m	
Assets carried at amortised cost						
Long-term receivables		1.4	1.4	3.6	3.6	
Trade receivables		61.4	61.4	70.6	70.6	
Other receivables		8.2	8.2	7.6	7.6	
Cash and cash equivalents		20.7	20.7	27.2	27.2	
Assets carried at fair value						
Derivative financial instruments:						
– Foreign currency contracts	2	2.4	2.4	0.6	0.6	
Liabilities carried at fair value						
Derivative financial instruments:						
– Foreign currency contracts	2	(0.4)	(0.4)	(5.0)	(5.0)	
Liabilities carried at amortised cost						
Trade and other payables		(58.1)	(58.1)	(66.7)	(66.7)	
Bank overdraft		—	_	(0.7)	(0.7)	
Borrowings		(40.4)	(40.4)	(135.8)	(135.8)	

The following summarises the major methods and assumptions used in estimating the fair values of financial instruments reflected in the above table.

#### **Derivative financial instruments**

Derivative financial instruments are marked-to-market using market prices.

#### Fixed and floating rate borrowings

The fair value of fixed and floating rate borrowings is estimated by discounting the future contracted principal and interest cash flows using the market rate of interest at the reporting date.

#### Trade and other receivables/payables

For receivables/payables with a remaining life of less than one year, the carrying amount is deemed to reflect the fair value. All other receivables/payables are discounted to determine their fair value. Advances received are excluded from other payables above as these are not considered to be financial liabilities.

#### Fair value hierarchy

The table above gives details of the valuation method used in arriving at the fair value of financial instruments. The different levels have been identified as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets and liabilities;
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3: inputs for the asset or liability that are not based on observable market data.

There have been no transfers between levels during the year.

#### Maturity of financial liabilities

	Carrying amount	Contractual cash flows	Due within one year	Due one to five years
31 March 2018	£m	£m	£m	£m
Trade and other payables	58.1	58.1	58.1	
Foreign exchange contracts	0.4	0.4	0.4	_
Bank overdraft	—	—	—	_
Borrowings	40.4	40.5	1.0	39.5
	98.9	99.0	59.5	39.5
	Carrying	Contractual	Due within	Due one to
	amount	cash flows	one year	five years
31 March 2017	fm	£m	£m	£m
Trade and other payables	66.7	66.7	66.7	—
Foreign exchange contracts	5.0	5.0	5.0	—
Bank overdraft	0.7	0.7	0.7	_
Borrowings	135.8	137.6	6.8	130.8
	208.2	210.0	79.2	130.8

At the reporting date the interest rate profile of the Group's interest-bearing financial instruments was:

	Carrying amount 2018 £m	Carrying amount 2017 £m
Variable rate instruments		
Financial assets	20.7	27.2
Financial liabilities	—	(70.3)
Fixed rate instruments		
Financial assets	2.6	3.6
Financial liabilities	(40.4)	(66.2)

year ended 31 March 2018

#### 22 Financial instruments continued

#### Sensitivity analysis

The Group has estimated the impact on the Consolidated Statement of Income and on equity of the following changes in market conditions at the balance sheet date:

- one percentage point increase in interest rates;
- ten percentage point weakening in the value of Sterling against all currencies; and
- ten percentage point strengthening in the value of Sterling against all currencies.

The sensitivities above represent the Directors' view of reasonably possible changes in each risk variable, not worst case scenarios or stress tests. The outputs from the sensitivity analysis are estimates of the impact of market risk assuming that the specified changes occur at the year end and are applied to the risk exposures at that date. Accordingly, they show the impact on the balance sheet of an instantaneous shock. The calculations include all hedges in place at the year end.

Actual results in the future may differ materially from these estimates due to commercial actions taken to mitigate any potential losses from such rate movements, to the interaction of more than one sensitivity occurring and to further developments in global financial markets. As such, this table should not be considered as a projection of likely future gains and losses.

	1% increase in interest rates	10% weakening in Sterling <sup>1</sup>	10% strengthening in Sterling <sup>2</sup>
	£m	£m	£m
At 31 March 2018			
Impact on Consolidated Statement of Income	—	(9.1)	9.1
Impact on equity		1.8	(1.8)
At 31 March 2017			
Impact on Consolidated Statement of Income		(5.4)	5.4
Impact on equity		6.5	(6.4)

1. Of the effect on the Consolidated Statement of Income, £6.1m (2017: £6.1m) would have been recognised on the "mark-to-market" line (Note 1).

2. Of the effect on the Consolidated Statement of Income, £6.1m (2017: £6.1m) would have been recognised on the "mark-to-market" line (Note 1).

#### 23 Called up share capital

Issued and fully paid ordinary shares:				
			2018	2017
			Number	Number
			of shares	of shares
At the beginning of the year			57,315,916	57,298,911
Issued for cash			59,688	17,005
At the end of the year			57,375,604	57,315,916
	2018		20	)17
	Number		Number	
	of shares	£m	of shares	£m
Allotted, called up and fully paid				
Ordinary shares of 5p each	57,375,604	2.9	57,315,916	2.9
		Number	Aggregate	Consideration
		of shares	nominal value	per share
New issues of ordinary shares of 5p each during the year				
Exercise of executive share options		29,502	£1,475	£1.35-£10.28
Exercise of executive share options – share appreciation rights		30,186	£1,509	£nil-£10.28
Exercise of executive shale options – shale appreciation rights		30,180	L1,309	LIIII-LIU.

The total consideration received from exercise of share options in the year was £0.2m (2017: fnil).

The holders of the ordinary shares are entitled to receive dividends as declared, a proportionate amount of capital on a winding up of the Company and one vote per share at meetings of the Company.

~ -	-			
24	BO	rro	WI	ngs

		Earlier of		
	Effective	repricing date or	2018	2017
Current	interest rate	maturity date	£m	£m
Bank overdrafts		On demand	—	0.7
European Investment Bank Loan – unsecured			—	6.2
Loan Notes – unsecured	4.36%	March 2021	1.0	_
			1.0	6.9
		Earlier of		
	Effective	repricing date or	2018	2017
Non-current	interest rate	maturity date	£m	£m
Revolving credit facility – unsecured			—	69.6
European Investment Bank Loan – unsecured			—	15.6
Loan Notes – unsecured	4.36%	March 2021	39.4	44.4
			39.4	129.6

The Group's undrawn committed facilities available at 31 March 2018 were £126.4m, comprising the undrawn portion of the Group's £126.4m revolving credit facility. This facility expires on 28 February 2020.

The Group's uncommitted facilities at 31 March 2018 were £20.6m.

The £1.0m (2017: fnil) current Loan Notes balance as at 31 March 2018 represents accrued interest due for payment during April 2018.

A reconciliation of the Group's borrowings balances is shown below.

lit facility	Loan		
		Notes	Total
£m	£m	£m	£m
69.6	21.8	44.4	135.8
(69.8)	(22.0)	(5.0)	(96.8)
_	—	1.0	1.0
0.2	0.2	—	0.4
_	—	40.4	40.4
	(69.8)	69.6     21.8       (69.8)     (22.0)	69.6       21.8       44.4         (69.8)       (22.0)       (5.0)         -       -       1.0         0.2       0.2       -

#### **25 Retirement benefit obligations**

The Group operates defined benefit plans in the UK and the USA; both offer pensions in retirement and death in service benefit to members. Pension benefits are related to members' final salary at retirement and their length of service. Both schemes have been closed to new members since 2001 and closed to future accrual since 2010.

The amounts recognised in the Consolidated Statement of Financial Position are:

	2018			2017			
	UK	USA	Total	UK	USA	Total	
	£m	£m	£m	£m	£m	£m	
Present value of funded obligations	297.4	7.4	304.8	304.0	9.0	313.0	
Fair value of plan assets	(284.9)	(4.6)	(289.5)	(282.5)	(5.4)	(287.9)	
Recognised liability for defined benefit obligations	12.5	2.8	15.3	21.5	3.6	25.1	

#### Reconciliation of the opening and closing balances of the present value of the defined benefit obligation

	2018			2017			
	UK £m	USA £m	Total £m	UK £m	USA £m	Total £m	
Benefit obligation at the beginning of the year	304.0	9.0	313.0	266.0	8.5	274.5	
Past service cost	(0.9)	_	(0.9)		_	_	
Interest on defined benefit obligation	8.1	0.3	8.4	9.1	0.3	9.4	
Benefits paid	(10.7)	(1.1)	(11.8)	(13.6)	(0.6)	(14.2)	
Remeasurement (gain)/loss on obligation	(3.1)	0.1	(3.0)	42.5	(0.2)	42.3	
Exchange rate adjustment	_	(0.9)	(0.9)		1.0	1.0	
Benefit obligation at the end of the year	297.4	7.4	304.8	304.0	9.0	313.0	

year ended 31 March 2018

#### 25 Retirement benefit obligations continued

Reconciliation of the opening and closing balances of the fair value of plan assets

	2018			2017		
	UK £m	USA £m	Total £m	UK £m	USA £m	Total £m
Fair value of plan assets at the beginning of the year	282.5	5.4	287.9	235.0	4.5	239.5
Interest on plan assets	7.6	0.2	7.8	8.1	0.2	8.3
Contributions by employers	7.1	0.5	7.6	6.9	0.6	7.5
Benefits paid	(10.7)	(1.1)	(11.8)	(13.6)	(0.6)	(14.2)
Administrative expenses	(0.5)	(0.1)	(0.6)	(0.5)	(0.1)	(0.6)
Actual return on assets excluding interest income	(1.1)	0.3	(0.8)	46.6	0.1	46.7
Exchange rate adjustment	_	(0.6)	(0.6)		0.7	0.7
Fair value of plan assets at the end of the year	284.9	4.6	289.5	282.5	5.4	287.9

#### Expense recognised in the Consolidated Statement of Income

	2018	2017
	£m	£m
Total – defined benefit expense	0.6	1.1
Contributions to defined contribution schemes	3.3	4.3
	3.9	5.4

The Group has agreed a basis for deficit recovery payments with the trustees of the UK pension scheme. The annual deficit recovery payment to the UK scheme was £7.1m (2017: £6.9m) for the financial year, payable through to and including 2021. For the years up to and including 2018, the payment will rise by the higher of inflation and growth in dividend per share; thereafter, the payment will increase in line with inflation. The weighted average durations of the UK and US defined benefit obligations at 31 March 2018 were 18 years and 16 years respectively (2017: 19 years and 16 years).

Prior to the year end, the trustees of the UK defined benefit scheme, in consultation with the Company, reduced its exposure to on-risk assets (a portfolio of market focused asset classes, the majority being equities) with a corresponding increase in its liability-driven investments, with the objective of steering a more stable journey to being fully funded. The pension fund's gross exposure to on-risk assets has fallen from 85% to 45%; the majority of transactions required to make this change were completed in February 2018. As a result, the level of risk inherent in the investment strategy is now significantly lower than previously, in addition to a substantial reduction in funding level volatility.

The Group has considered the requirements of IFRIC 14. The terms of the scheme give the Group the right to recover any surplus assets on the scheme upon wind-up and therefore management has concluded that there is no impact on the amounts recognised in respect of retirement benefit obligations.

The Group expects to contribute approximately £7.8m to defined benefit plans in the next financial year.

The pension costs are recorded in the following lines of the Consolidated Statement of Income:

	2018 £m	2017 £m
Cost of sales	0.8	1.1
Selling and marketing costs	0.7	1.0
Administration and shared services	0.8	1.1
Research and Development	1.0	1.1
Financial expenditure	0.6	1.1
	3.9	5.4

#### Remeasurement gains and losses shown in the Consolidated Statement of Comprehensive Income

	2018	2017
	£m	£m
Actual return on assets excluding interest income	(0.8)	46.7
Experience (loss)/gain on scheme obligations	(2.8)	3.7
Changes in assumptions underlying the present value of scheme obligations:		
– Financial	4.0	(51.6)
– Demographic	1.8	5.6

Cumulative actuarial losses reported in the Consolidated Statement of Comprehensive Income since 1 April 2004, the transition date to IFRS, are £29.3m (2017: £31.5m cumulative actuarial losses).

#### Sensitivity analysis

The table below shows the sensitivity of the Consolidated Statement of Financial Position to changes in the significant pension assumptions:

	Balance at 31 March 2018	Discount rate (-0.1% p.a.)	Inflation rate (+0.1% p.a.)	Life expectancy (+one year)
	£m	£m	£m	£m
Value of funded obligations	304.8	310.3	309.7	316.7
Fair value of plan assets	(289.5)	(289.5)	(289.5)	(289.5)
Deficit	15.3	20.8	20.2	27.2

The valuation of defined benefit liabilities is most sensitive to changes in the discount rate, inflation rate and mortality rate. The sensitivities have been calculated by running the liability calculations in full using the alternative assumptions. In each case, only the indicated assumption has changed by the amount stated. For the inflation sensitivity, the impact on the assumptions that are based on RPI inflation, such as CPI inflation and the inflation-linked pension increases, has been included.

#### Defined benefit scheme – UK

A full actuarial valuation of the UK plan was carried out as at 31 March 2015 and has been updated to 31 March 2018 by a qualified independent actuary. The major assumptions used by the actuary for the purposes of IAS 19 were (in nominal terms):

	As at 31 March 2018 %	As at 31 March 2017 %
Discount rate	2.7%	2.7%
Rate of increase in pensions in payment ("3LPI")	2.5%	2.5%
Rate of increase in pensions in payment ("5LPI")	3.0%	3.1%
Rate of inflation ("CPI")	2.0%	2.1%
Mortality – pre and post-retirement	93% of S2PA tables (96% for females)	93% of S2PA tables (96% for females)
– males and females	future improvement in line with	future improvement in line with
	CMI 2017 with 1.25% long-term trend	CMI 2016 with 1.25% long-term trend

The mortality assumptions imply the following expected future lifetime from age 65:

	2018	2017
	years	years
Pre-retirement – males	23.9	24.0
Pre-retirement – females	25.7	25.7
Post-retirement – males	22.5	22.6
Post-retirement – females	24.1	24.2

The assumptions have been chosen by the Directors from a range of possible actuarial assumptions, which, due to the timescales covered, may not be borne out in practice.

The assets in the plan were:

	Value at	Value at
	31 March	31 March
	2018	2017
	£m	£m
Equities	90.8	107.9
Corporate and Emerging Market Bonds	-	46.6
Gilts	123.3	47.0
Property	6.0	3.7
Commodities	—	5.8
Insurance-linked funds	24.1	14.8
Credit and global loan funds	2.1	12.6
Hedge funds	26.6	15.3
Absolute return fixed income fund	5.8	5.8
Liability hedge overlay	2.5	_
Cash	3.7	23.0
	284.9	282.5

year ended 31 March 2018

#### 25 Retirement benefit obligations continued

#### Defined benefit scheme – UK continued

Where assets have no observable market price a valuation will be provided by the fund manager. The scheme's investment manager will accept that valuation if it is within the expected range of performance. Otherwise, the investment manager will query the valuation with the fund manager. Complex financial instruments are valued by the scheme's investment manager who uses financial models which take as their input the characteristics of the instrument and observable market data such as swap rates.

The UK pension scheme implements a liability hedge strategy which is designed to protect the scheme's funding level from changes in gilt yields and inflation expectations. The liability hedge strategy consists of a portfolio of gilts, gilt derivatives, interest rate and inflation swaps. At 31 March 2018, the liability hedge strategy fully covered the scheme's liabilities from changes in gilt yields and inflation expectations. However, this is not a precise match for the IAS 19 defined benefit obligation, which is based on corporate bond yields rather than gilt yields.

#### Defined benefit scheme – USA

A full actuarial valuation of the USA plan was carried out as at 31 December 2014, which for reporting purposes has been updated to 31 March 2018 by a qualified independent actuary. The major assumptions used by the actuary for the purposes of IAS 19 were (in nominal terms):

	As at 31 March 2018 %	As at 31 March 2017 %
Discount rate	3.95%	4.00%
Rate of increase to pensions in payment	0.00%	0.00%
Rate of inflation	2.00%	2.00%
Mortality – pre and post-retirement	RP-2014 with projection	RP-2014 with projection
	Scale MP-2017 (fully generational),	Scale MP-2016 (fully generational),
	male and female	male and female

	Value at	Value at
	31 March	31 March
	2018	2017
	£m	£m
Equities	2.0	2.4
Bonds	2.3	3.0
Other	0.3	
	4.6	5.4

#### **Defined contribution schemes**

The assets in the plan were:

In the UK, employees are offered participation in the defined contribution Oxford Instruments Stakeholder Plan. The Company contribution rate and employee contribution rate varies between grades and whether the individual had previously been in the defined benefit scheme. The Company contribution ranges between 4% and 14% of base salary. The Group also operates a 401k defined distribution plan in the USA. Details of pension schemes contributions made in respect of Directors can be found in the Remuneration Report on pages 67 to 80.

#### 26 Trade and other payables

	2018	2017
	£m	£m
Trade payables	25.0	32.0
Customer deposits	15.0	13.2
Social security and other taxes	2.9	2.5
Accrued expenses and deferred income	38.1	40.6
Other creditors	4.5	4.7
	85.5	93.0

24
Company
Information

27 Provisions for other	liabilities and	charges

	Warranties	claims	Other	Total
	£m	£m	£m	£m
Balance at 1 April 2017	4.5	3.2	2.1	9.8
Effect of disposal of subsidiary	(0.7)	—	(0.2)	(0.9)
Provisions made during the year	1.9	0.7	3.2	5.8
Provisions used during the year	(0.8)	—	(0.4)	(1.2)
Provisions released during the year	(0.8)	(0.7)	—	(1.5)
Effect of movement in foreign exchange	—	—	(0.3)	(0.3)
Balance at 31 March 2018	4.1	3.2	4.4	11.7
Amounts falling due after more than one year			1.7	1.7
Amounts falling due before one year	4.1	3.2	2.7	10.0

#### Warranty provisions

Product warranty provisions reflect commitments made to customers on the sale of goods in the ordinary course of business and included within the Group companies' standard terms and conditions. Warranty commitments typically apply for a twelve-month period. The provision represents the Directors' best estimate of the Group's liability based on past experience.

#### **Intellectual Property related claims**

The Company has on occasion been required to take legal or other actions to defend itself against proceedings brought by other parties. Provisions are made for the expected costs associated with such matters, based on past experience of similar items and other known factors, taking into account professional advice received, and represent the Directors' best estimate of the likely outcome. The timing of utilisation of these provisions is frequently uncertain, reflecting the complexity of issues and the outcome of various court proceedings and negotiations. Contractual and other provisions represent the Directors' best estimate of the cost of settling future obligations and reflect the Directors' assessment of the likely settlement method, which may change over time. However, no provision is made for proceedings which have been, or might be, brought by other parties against Group companies unless the Directors, taking into account professional advice received, assess that it is more likely than not that such proceedings may be successful. The Group's expectation is that the other provisions are likely to be utilised within a twelve-month period. There is one provision for £2m where the range of possible outcomes is between £nil and £3.1m. As such, there could be a material effect on the Financial Statements in the next twelve months should the outcome be different from management's estimate.

#### Other provisions

Other provisions relate to various obligations including obligations in respect of onerous leases, onerous contracts and dilapidation provisions.

#### **28 Operating leases**

#### Leases under which the Group acts as lessor

Non-cancellable future total minimum operating lease rentals are receivable as follows:

	2018	2017
	£m	£m
Within one year	2.9	2.2
Between one and five years	0.2	0.3
Over five years	-	_
	3.1	2.5

Operating leases under which the Group acts as lessor relate to medical imaging equipment available for rent on typically short-term agreements. There are no material contingent rent payment arrangements.

#### Leases under which the Group acts as lessee

Non-cancellable future total minimum operating lease rentals are payable as follows:

	2018 £m	2017 £m
Within one year	2.9	3.8
Between one and five years	6.6	9.5
Over five years	0.9	1.6
	10.4	14.9

During the year ended 31 March 2018, £3.8m was recognised as an expense in the Consolidated Statement of Income in respect of operating leases (2017: £4.5m).

IP-related

year ended 31 March 2018

#### 28 Operating leases continued

#### Leases under which the Group acts as lessee continued

The majority of operating leases under which the Group is a lessee relate to properties occupied by the Group in the course of its business. There are no material contingent rent payment arrangements, purchase options or escalation clauses. It is expected that most leases could be renewed on the existing or similar terms. The leases do not impose any material restrictions in respect of dividends, additional debt requirements or further leasing.

#### **29 Capital commitments**

During the year ended 31 March 2018, the Group entered into contracts to purchase property, plant and equipment which are expected to be settled in the following financial year for fnil (2017: fnil).

#### **30 Contingencies**

In an international group of companies, a variety of legal claims arise from time to time. The Board, having taken legal advice, is of the opinion that any ongoing actions and investigations will not have a material impact on the Group's financial position.

#### **31 Related parties**

Transactions between the Company and its subsidiaries, which are related parties, have been eliminated on consolidation and are not disclosed in this note.

During the current year, members of the Group's Management Board have taken on new responsibilities following the introduction of the Horizon strategy. As a result of this, Management Board members are now considered to be key management personnel and their remuneration is included in the table below.

The remuneration of key management personnel is as follows:

	2018	2017
	£m	£m
Short-term employee benefits	3.4	1.7
Post-employment benefit	0.2	0.1
Share-based payment charge/(credit)	0.4	(0.2)
Total	4.0	1.6

Short-term employee benefits comprise salary and benefits earned during the year and bonuses awarded for the year.

The prior year share-based payment credit of £0.2m arose due to the reversal of the share option charge relating to options previously issued to Jonathan Flint.

During the year, the Company paid £nil (2017: £0.1m) to Imperialise Limited, a company for which Nigel Keen (former Chairman) is a Director. The payment was for his services as Chairman of the Group. The liability due to Imperialise Limited at the year end was £nil (2017: £nil).

During the year, the Group supplied services and materials to, and purchased services and materials from, its associate on an arm's length basis. It had the following transactions with its associate during the year:

2018	Revenue £m	Purchases £m	Receivables £m	Payables £m
ScientaOmicron GmbH	0.6	—	3.0	_
2017	Revenue	Purchases	Receivables	Payables
2017 ScientaOmicron GmbH	fm 0.1	£m	£m 3.6	£m
	0.1		5.0	

#### 32 Subsequent events

The interim dividend of 3.7 pence per share (total cost £2.1m) was paid after the year end. In addition, on 12 June 2018, the Directors proposed a final dividend of 9.6 pence per ordinary share (total cost £5.5m). The total amount of £5.5m has not been provided for and there are no income tax consequences.

Year-end rates		2018	2017
US Dollar		1.40	1.25
Euro		1.14	1.17
Yen		149	139
Average translation rates 2018	US Dollar	Euro	Yen
April	1.27	1.18	142
May	1.29	1.17	143
June	1.29	1.14	144
July	1.31	1.13	146
August	1.30	1.10	143
September	1.31	1.11	146
October	1.33	1.13	150
November	1.32	1.13	149
December	1.34	1.12	151
January	1.39	1.13	153
February	1.41	1.14	151
March	1.40	1.14	149
Average translation rates 2017	US Dollar	Euro	Yer
April	1.45	1.27	159
May	1.46	1.30	159
June	1.41	1.27	150
July	1.35	1.21	138
August	1.32	1.18	134
September	1.31	1.16	132
October	1.26	1.13	130
November	1.23	1.14	134
December	1.24	1.17	142
January	1.25	1.17	144
February	1.25	1.18	142
March	1.25	1.18	140

#### 33 Exchange rates

Oxford Instruments plc Report and Financial Statements 2018 133

# Parent Company Statement of Financial Position as at 31 March 2018

	Notes	2018 £m	2017 £m
Assets			
Non-current assets			
Intangible assets	d	1.0	_
Tangible assets	С	0.6	1.2
Investments in subsidiary undertakings	е	320.9	320.5
Debtors	f	1.4	3.6
Deferred tax assets	h	1.5	1.7
		325.4	327.0
Current assets			
Debtors	f	19.5	62.5
Current income tax recoverable		0.3	0.6
Cash at bank and in hand		3.6	2.5
		23.4	65.6
Total assets		348.8	392.6
Equity			
Capital and reserves attributable to the Company's equity Shareholders			
Share capital		2.9	2.9
Share premium account		61.7	61.5
Capital redemption reserve		0.1	0.1
Other reserves		7.6	7.6
Profit and loss account		99.7	114.3
		172.0	186.4
Liabilities			
Non-current liabilities			
Long-term loans		39.4	129.6
Retirement benefit obligations		2.9	4.9
Provisions for liabilities	h	0.4	0.4
		42.7	134.9
Current liabilities			
Bank loans and overdrafts		32.8	22.1
Other creditors	g	101.3	49.2
		134.1	71.3
Total liabilities		176.8	206.2
Total liabilities and equity		348.8	392.6

The Financial Statements were approved by the Board of Directors on 12 June 2018 and signed on its behalf by:

Ian Barkshire Gavin Hill Director Director Company number: 775598

# **Parent Company Statement of Changes in Equity**

year ended 31 March 2018

	Share capital £m	Share premium account £m	Capital redemption reserve £m	Other reserves £m	Profit and loss account £m	Total £m
Balance at 31 March 2016	2.9	61.5	0.1	7.6	126.2	198.3
Loss for the year	—	_	—	_	(6.7)	(6.7)
Other comprehensive income:						
Remeasurement of defined benefit liability, net of tax	—	_	—	_	1.7	1.7
Total comprehensive income for the year	_	_		_	(5.0)	(5.0)
Proceeds from shares issued	_	_	_	_	_	_
Share options awarded to employees	_	_	_		0.2	0.2
Share options awarded to employees of subsidiaries	_	_	_		0.3	0.3
Dividends paid	_	_	_	_	(7.4)	(7.4)
Balance at 31 March 2017	2.9	61.5	0.1	7.6	114.3	186.4
Loss for the year	_	_	_	_	(8.7)	(8.7)
Other comprehensive income:						
Remeasurement of defined benefit liability, net of tax	_	_	_	_	0.4	0.4
Total comprehensive income for the year	_	_	_	_	(8.3)	(8.3)
Proceeds from shares issued	_	0.2	_	_	_	0.2
Share options awarded to employees	_	_	_	_	0.7	0.7
Share options awarded to employees of subsidiaries	_	_	_	_	0.4	0.4
Dividends paid	_	_	_	_	(7.4)	(7.4)
Balance at 31 March 2018	2.9	61.7	0.1	7.6	99.7	172.0

Details of issued, authorised and allotted share capital are included in Note 23 to the Group Financial Statements.

Details of treasury shares held by the Company are included as a Note to the Consolidated Statement of Changes in Equity.

Details of the Group's share option schemes are included in Note 12 to the Group Financial Statements.

Details of the Group's defined benefit pension scheme are included in Note 25 to the Group Financial Statements.

Details of dividends paid are included in Note 14 to the Group Financial Statements.

Other reserves relates to premium on shares issued as part of acquisitions made in the year to 31 March 1987.

# **Notes to the Parent Company Financial Statements**

year ended 31 March 2018

#### (a) Accounting policies

Oxford Instruments plc is a company incorporated and domiciled in the UK.

These Financial Statements were prepared in accordance with Financial Reporting Standard 101 Reduced Disclosure Framework (FRS 101). The amendments to FRS 101 (2013/14 Cycle) issued in July 2015 and effective immediately have been applied.

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 IFRS"), 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 has been taken.

In these Financial Statements, the Company has applied the exemptions available under FRS 101 in respect of the following disclosures:

- a Cash Flow Statement and related notes;
- comparative period reconciliations for share capital, tangible fixed assets, intangible assets and investment properties;
- disclosures in respect of transactions with wholly owned subsidiaries;
- disclosures in respect of capital management;
- the effects of new but not yet effective IFRS; and
- disclosures in respect of the compensation of key management personnel.

As the consolidated Financial Statements of Oxford Instruments plc include the equivalent disclosures, the Company has also taken the exemptions under FRS 101 available in respect of the following disclosures:

- IFRS 2 Share-based Payments in respect of Group settled share-based payments; and
- certain disclosures required by IFRS 13 Fair Value Measurement and the disclosures required by IFRS 7 Financial Instrument Disclosures.

The accounting policies set out below have, unless otherwise stated, been applied consistently to all periods presented in these Financial Statements.

#### **Measurement convention**

The Financial Statements are prepared on the historical cost basis except that the following assets and liabilities are stated at their fair value: derivative financial instruments.

#### Going concern

The Financial Statements have been prepared on a going concern basis, based on the Directors' opinion, after making reasonable enquiries, that the Company has adequate resources to continue in operational existence for the foreseeable future.

#### Taxation

Income tax on the profit or loss for the year comprises current and deferred tax. Income tax is recognised in profit or loss except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The following temporary differences are not provided for: the initial recognition of goodwill; the initial recognition of assets or liabilities that affect neither accounting nor taxable profit; and differences relating to investments in subsidiaries to the extent that they will probably not reverse in the future.

The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the Balance Sheet date.

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the asset can be utilised. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

Additional income taxes that arise from the distribution of dividends are recognised at the same time as the liability to pay the related dividend.

#### Non-derivative financial instruments

Non-derivative financial instruments comprise trade and other debtors, cash and cash equivalents, loans and borrowings, and trade and other creditors.

#### Trade and other debtors

Trade and other debtors are recognised initially at fair value. Subsequent to initial recognition they are measured at amortised cost using the effective interest method, less any impairment losses.

#### Trade and other creditors

Trade and other creditors are recognised initially at fair value. Subsequent to initial recognition they are measured at amortised cost using the effective interest method.

#### Cash and cash equivalents

Cash and cash equivalents comprise cash balances and call deposits.

#### Interest-bearing borrowings

Interest-bearing borrowings are recognised initially at fair value less attributable transaction costs. Subsequent to initial recognition, interest-bearing borrowings are stated at amortised cost using the effective interest method, less any impairment losses. Details of the Group's interest-bearing borrowings are included in Note 24 to the Group Financial Statements.

#### Intra-Group lending

The Company has lent funds to and from its UK subsidiaries on interest-free terms. These amounts are repayable on demand. They are stated at cost less any impairment losses.

#### Derivative financial instruments

The Company's accounting policies for financial instruments are the same as the Group's accounting policies under IFRS, namely IAS 32 Financial Instruments: Presentation, IAS 39 Financial Instruments: Recognition and Measurement and IFRS 7 Financial Instruments: Disclosures. These policies are set out in accounting policy "(e) Financial instruments" in the Group accounting policies, on page 99.

# 04: Company Information

#### Tangible fixed assets

Tangible fixed assets are stated at cost less accumulated depreciation and accumulated impairment losses.

Where parts of an item of tangible fixed assets have different useful lives, they are accounted for as separate items of tangible fixed assets.

Depreciation is charged to the profit and loss account on a straight-line basis over the estimated useful lives of each part of an item of tangible fixed assets. The estimated useful lives are as follows:

- Computer equipment
   4 years
- Motor vehicles 4 years

Depreciation methods, useful lives and residual values are reviewed at each balance sheet date.

#### Intangible assets

Intangible assets represents internally developed software. Amortisation is charged to the profit and loss account on a straight-line basis over the estimated useful lives of intangible assets unless such lives are indefinite. Intangible assets are amortised from the date they are available for use. The estimated useful lives are as follows:

Computer software 10 years

#### Impairment excluding deferred tax assets Financial assets (including trade and

# Financial assets (including trade and other debtors)

The Company assesses at each Balance Sheet reporting date whether there is any objective evidence that a financial asset, or group of financial assets, is impaired. A financial asset, or group of financial assets, is deemed to be impaired if, and only if, there is objective evidence of impairment as a result of one or more events that have occurred after the initial recognition of the asset (an incurred "loss event") and that loss event has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated.

#### Non-financial assets

The carrying amounts of the Company's non-financial assets, other than deferred tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated.

The recoverable amount of an asset or cash generating unit is the greater of its value in use and its fair value less costs to sell. 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. For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets (the "cash generating unit" or "CGU").

An impairment loss is recognised if the carrying amount of an asset or its CGU exceeds its estimated recoverable amount. Impairment losses are recognised in profit or loss. Impairment losses recognised in respect of CGUs are allocated first to reduce the carrying amount of any goodwill allocated to the units, and then to reduce the carrying amounts of the other assets in the unit (group of units) on a pro-rata basis.

Impairment losses recognised in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed 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, if no impairment loss had been recognised.

#### **Employee benefits** Defined contribution plans

A defined contribution plan is a post-employment benefit plan under which the Company pays fixed contributions into a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution pension plans are recognised as an expense in the profit and loss account in the periods during which services are rendered by employees.

#### Defined benefit plans

A defined benefit plan is a post-employment benefit plan other than a defined contribution plan. The Company's net obligation in respect of defined benefit pension plans is calculated by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value, and the fair value of any plan assets (at bid price) are deducted. The Company determines the net interest on the net defined benefit liability/(asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the net defined benefit liability/(asset).

The discount rate is the yield at the reporting date on bonds that have a credit rating of at least AA that have maturity dates approximating the terms of the Company's obligations and that are denominated in the currency in which the benefits are expected to be paid.

Remeasurements arising from defined benefit plans comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest). The Company recognises them immediately in other comprehensive income and all other expenses related to defined benefit plans in employee benefit expenses in profit or loss.

The calculation of the defined benefit obligations is performed by a qualified actuary using the projected unit credit method. When the calculation results in a benefit to the Company, the recognised asset is limited to the present value of benefits available in the form of any future refunds from the plan or reductions in future contributions and takes into account the adverse effect of any minimum funding requirements.

The Company is the sponsoring employer of a Group-wide defined benefit pension plan. The net defined benefit cost of the plans is charged to participating entities on the basis of the proportion of scheme membership attributable to each legal entity at the reporting date. The contributions payable by the participating entities are determined using an agreed ratio which has been in place for approximately ten years.

### Notes to the Parent Company Financial Statements continued

year ended 31 March 2018

#### (a) Accounting policies continued Employee benefits continued Short-term benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognised for the amount expected to be paid under short-term cash bonus or profit-sharing plans if the Company has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

#### Termination benefits

Termination benefits are recognised as an expense when the Company is demonstrably committed, without realistic possibility of withdrawal, to a formal detailed plan to either terminate employment before the normal retirement date, or to provide termination benefits as a result of an offer made to encourage voluntary redundancy. Termination benefits for voluntary redundancies are recognised as an expense if the Company has made an offer of voluntary redundancy, it is probably that the offer will be accepted, and the number of acceptances can be estimated reliably. If benefits are payable more than twelve months after the reporting date, then they are discounted to their present value.

#### Share-based payment transactions

The grant date fair value of share-based payments awards granted to employees is recognised as an employee expense, with a corresponding increase in equity, over the period in which the employees become unconditionally entitled to the awards. The fair value of the awards granted is measured using an option valuation model, taking into account the terms and conditions upon which the awards were granted. The amount recognised as an expense is adjusted to reflect the actual number of awards for which the related service and non-market vesting conditions are expected to be met, such that the amount ultimately recognised as an expense is based on the number of awards that do meet the related service and non-market performance conditions at the vesting date. For share-based payment awards with non-vesting conditions, the grant date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

Where the Company grants options over its own shares to the employees of its subsidiaries it recognises, in its individual Financial Statements, an increase in the cost of investment in its subsidiaries equivalent to the equity settled share-based payment charge recognised in its consolidated Financial Statements with the corresponding credit being recognised directly in equity. Amounts recharged to the subsidiary are recognised as a reduction in the cost of investment in subsidiary. If the amount recharged exceeds the increase in the cost of investment the excess is recognised as a dividend.

#### Own shares held by ESOP trust

Transactions of the Company-sponsored ESOP trust are treated as being those of the Company and are therefore reflected in the Company Financial Statements. In particular, the trust's purchases and sales of shares in the Company are debited and credited directly to equity.

#### Provisions

A provision is recognised in the Balance Sheet when the Company has a present legal or constructive obligation as a result of a past event, that can be reliably measured and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects risks specific to the liability. The timing of the recognition requires the application of judgement to existing facts and circumstances which can be subject to change. Amounts provided represent the Group's best estimate of exposure based on currently available information.

#### Leases

Payments (excluding costs for services and insurance) made under operating leases are recognised in the profit and loss account on a straight-line basis over the term of the lease. Lease incentives received are recognised in the profit and loss account as an integral part of the total lease expense.

#### Foreign currencies

The Company enters into forward exchange contracts and options to mitigate the currency exposures that arise on sales and purchases denominated in foreign currencies. Transactions in foreign currencies are converted into Sterling at the rate ruling on the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated at the rates ruling at the Balance Sheet date or at the appropriate forward contract rates. Exchange profits and losses arising from the above are dealt with in the profit and loss account.

#### Own shares held by Employee Benefit Trust (EBT)

Transactions of the Group-sponsored EBT are included in the Group Financial Statements. In particular, the trust's purchase of shares in the Company are debited directly to equity.

#### Investments

Investments in subsidiaries are stated at cost, less any provision for impairment, where appropriate.

# Dividends on shares presented within Shareholders' funds

Dividends unpaid at the Balance Sheet date are only recognised as a liability at that date to the extent that they are appropriately authorised and are no longer at the discretion of the Company. Unpaid dividends that do not meet these criteria are disclosed in the notes to the Financial Statements.

#### Financial guarantee contracts

Where the Company enters into financial guarantee contracts to guarantee the indebtedness of other companies within its Group, the Company considers these to be insurance arrangements and accounts for them as such. In this respect, the Company treats the guarantee contract as a contingent liability until such time as it becomes probable that the Company will be required to make a payment under the guarantee.

#### (b) Loss for the year

The Company's loss for the financial year was £8.7m (2017: loss of £6.7m). Other Comprehensive Income in the year was £0.4m (2017: £1.7m). The expense will not subsequently be reclassified to profit or loss.

The auditor's remuneration comprised £140,000 (2017: £140,000) for the statutory audit.

The average number of people employed by the Company (including Directors) during the year was 47 (2017: 51). All of these individuals were involved in administration.

The aggregate payroll costs (including Directors) of these people were as follows:

	2018	2017
	£m	£m
Wages and salaries	3.9	5.0
Social security costs	0.6	0.6
Other pension costs	0.1	0.1
	4.6	5.7

The share-based payment charge was £0.7m (2017: charge of £0.2m). Details of the Group's share option schemes are included in Note 12 to the Group Financial Statements.

Full details of the emoluments paid to Directors can be found in the Remuneration Report on pages 67 to 80.

#### (c) Tangible fixed assets

equipment £m 5.9 0.3	Total £m 5.9 0.3
5.9 0.3	5.9
0.3	
	03
	0.5
(3.6)	(3.6)
(0.6)	(0.6)
2.0	2.0
4.7	4.7
0.3	0.3
(3.6)	(3.6)
1.4	1.4
1.2	1.2
0.6	0.6
	0.3 (3.6) <b>1.4</b> 1.2

# Notes to the Parent Company Financial Statements continued year ended 31 March 2018

(d) Intangible assets	
	Software £m
Cost	
Balance at 1 April 2017	2.2
Additions	0.5
Transfer from tangible fixed assets	0.6
Balance at 31 March 2018	3.3
Depreciation and impairment losses	
Balance at 1 April 2017	2.2
Charge for year	0.1
Balance at 31 March 2018	2.3
Net book value	
At 31 March 2017	_
At 31 March 2018	1.0
(e) Investments	
	Investments in subsidiary
	undertakings
	fm
Cost or valuation	
Balance at 1 April 2017	339.2
Expense in respect of share options transferred to subsidiary undertakings	0.4
Balance at 31 March 2018	339.6
Impairment	
Balance at 1 April 2017 and 31 March 2018	18.7
Net book value	
At 31 March 2017	320.5
At 31 March 2018	320.9

The following is a full list of the subsidiaries and associates and their country of registration as at 31 March 2018. This information is provided in accordance with Section 409 of the Companies Act 2006.

Unless otherwise stated, entities listed below are wholly owned by either the Company or a subsidiary of the Company.

	Registered office address	Country c incorporatio
Subsidiaries		
NanoTechnology Tools Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	Uł
Oxford Instruments Analytical Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	UI
Oxford Instruments Superconductivity Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Oxford Instruments Innovation Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Oxford Instruments NanoScience Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Oxford Magnet Technology Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Oxford Instruments Industrial Analysis Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Oxford Instruments Industrial Products Holdings Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Oxford Instruments Industrial Products Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
RMG Technology Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Oxford Instruments NanoAnalysis Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Oxford Instruments NanoTechnology Tools Holdings Limited		U
Andor Technology Limited	7 Millennium Way, Springvale Business Park, Belfast, NI, BT12 7AL	U
Andor U.S. Holdings, Inc	425 Sullivan Avenue, Suite 3, South Windsor, CT 06074	US
Bitplane AG	Badenerstrasse 682, 8048, Zürich	Switzerlar
Bitplane Inc	425 Sullivan Avenue, Suite 3, South Windsor, CT 06074	US
Spectral Applied Research Inc	199 Bay Street, Suite 5300, Commerce Court West, Toronto ON M5L 1B9	Canad
Oxford Instruments Molecular Biotools Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Resonance Instruments Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Oxford Instruments NanoTechnology Tools Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Link Analytical Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Oxbridge Instruments Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Oxford Instruments AFM Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Oxford Instruments Plasma Technology Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Plasma Technology (UK) Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Oxford Instruments Overseas Holdings Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Oxford Instruments Technology (Shanghai) Co. Limited	Floor 1, Building 60, 461 Hongcao Road, Xuhui District, Shanghai	Chir
Oxford Instruments Technologies Oy	Technopolis Innopoli 1, Tekniikantie12, Espoo, 02150	Finlar
Oxford Instruments Holdings 2013 Inc	300 Baker Avenue, Suite 150, Concord MA 01742	US
Oxford Instruments America Inc	300 Baker Avenue, Suite 150, Concord MA 01742	US
Oxford Instruments Service LLC	300 Baker Avenue, Suite 150, Concord MA 01742	US
Oxford Instruments Asylum Research Inc	6310 Hollister Avenue, Santa Barbara, CA 93117	US
Asylum Research UK Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Oxford Instruments KK	IS Building, 3-32-42 Higashi-Shinagawa, Shinagawa-ku, Tokyo, 140-0002	Japa
Oxford Instruments Overseas Marketing Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Oxford Instruments X-Ray Technology Inc	360 El Pueblo Road, Scotts Valley, CA 95066	US
Oxford Instruments Holdings Europe Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Oxford Instruments Guernsey Limited <sup>1</sup>	Frances House, Sir William Place, St Peter Port, GY1 4HQ	Guernse
Oxford Instruments Holdings GmbH	Borsigstrasse 15a, 65205, Wiesbaden	Germar
Oxford Instruments GmbH	Borsigstrasse 15a, 65205, Wiesbaden	Germar
Oxford Instruments Nordiska Ab	Arenavägen 41, 10th Floor, 121 77 Johanneshov	Swede
Oxford Instruments Overseas Holdings 2008 Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	L
Oxford Instruments UK 2013 Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	U
Oxford Instruments Funding (Ireland) Unlimited		
(in members' voluntary liquidation)	2nd Floor, 1-2 Victoria Buildings, Haddington Road, Dublin 4, D04 XN32	Irelan

# Notes to the Parent Company Financial Statements continued

year ended 31 March 2018

	Registered office address	Country of incorporation
Subsidiaries continued		
Oxford Instruments Funding Ltd	Frances House, Sir William Place, St Peter Port, GY1 4HQ	Guernsey
Oxford Instruments Private Limited	Messrs Tan Rajah & Cheah, 80 Raffles Place,	C
Oxford Instruments India Private Limited	#58-01 UOB Plaza 1, Singapore, 048624 Unit No.11, Marwah's Complex, Krishanlal Marwah Marg, Andheri East, Mumbai, Maharashtra, 400 072	Singapore India
Oxford Instruments SAS	77 ZA de Montvoisin, 91400 Gometz la Ville	France
Oxford Instruments Synchrotron Research Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	UK
Oxford Semicon Limited	Tubney Woods, Abingdon, Oxon, OX13 5QX	UK
Associates		
Scienta Scientific AB <sup>3</sup>	Vallongata 1, 752 28, Uppsala	Sweden
ScientaOmicron GmbH <sup>3</sup>	Limburger Strasse 75, 65232 Taunusstein	Germany
Omicron Nanotechnology Japan, Inc. <sup>3</sup>	No. 20 Shimokawa Building, 5-30-15, Ota-ku, Tokyo	Japan
Omicron Nanotechnology Limited <sup>3</sup>	St James House, Kensington Square, London W8 5HD	UK
Omicron UHV Technik Limited <sup>3</sup>	St James House, Kensington Square, London W8 5HD	UK
ScientaOmicron Inc. <sup>3</sup>	240 Saint Paul St, Suite 301, Denver CO 80238	USA
Societe Omicron Nanotechnology EURL <sup>3</sup>	Le Plan d'Aigues, RN 7, 1370 St. Cannat	France
VACGEN Limited <sup>3,4</sup>	St James House, Kensington Square, London W8 5HD	UK

1. Voluntary strike off 23 April 2018.

2. UK tax resident.

3. Year end is 31 December. The Group has a 47% shareholding in these entities.

4. Disposed of 20 April 2018.

Equity owned by the Company represents issued ordinary share capital. All subsidiaries are consolidated in the Group accounts.

#### (f) Debtors

	2018 £m	2017 £m
Amounts falling due after one year:		
Amounts owed by associate undertakings	1.4	3.6
Amounts falling due within one year:		
Amounts owed by subsidiary undertakings	15.2	57.5
Amounts owed by associate undertakings	1.2	_
Other debtors	2.8	4.7
Prepayments and accrued income	0.3	0.3
	20.9	66.1
(g) Other creditors		
	2018	2017
	£m	£m
Trade creditors	0.4	0.1
Amounts owed to subsidiary undertakings	95.4	38.6
Tax, social security and sales related taxes	1.6	1.2
Other financial liabilities	1.4	6.7
Accruals and deferred income	2.5	2.6
	101.3	49.2

# 04: Company Information

#### (h) Provisions for liabilities

	provision
Balance at 1 April 2017	0.4
Provisions made during the year	—
Provisions used during the year	—
Balance at 31 March 2018	0.4

#### Deferred tax asset

	2010	2017
	£m	£m
Balance at 1 April	1.7	1.9
Profit and loss (debit)/credit	(0.1)	0.2
Other comprehensive income debit	(0.1)	(0.4)
Balance at 31 March	1.5	1.7

The amounts of deferred tax assets are as follows:

	Recognised	d
	2018	2017
	£m	£m
Excess of depreciation over corresponding capital allowances	0.6	0.6
Tax losses	—	—
Provisions	—	—
Employee benefits – pension and share schemes	0.9	1.1
	1.5	1.7

The Company recognises deferred tax assets only to the extent that there will be suitable taxable profits from which the future reversal of the underlying timing differences can be deducted.

Deferred tax assets have not been recognised in respect of the following items:

2018	2017
£m	£m
Tax losses 0.5	1.0
0.5	1.0

A reduction in the UK corporation tax rate from 21% to 20% (effective from 1 April 2015) was substantively enacted on 2 July 2013. Further reductions to 19% (effective from 1 April 2017) and to 18% (effective from 1 April 2020) were substantively enacted on 26 October 2015, and an additional reduction to 17% (effective from 1 April 2020) was substantively enacted on 6 September 2016. This will reduce the Company's future current tax charge accordingly. The UK deferred tax liability at 31 March 2018 has been calculated based on those rates.

#### (i) Pension commitments

#### Defined benefit scheme

The Company and its employees contribute to the Oxford Instruments Pension Scheme ("the Scheme"), a defined benefit scheme, which offers pensions in retirement and death in service benefit to members. Pension benefits are related to members' final salary at retirement and their length of service.

The Scheme was closed to new members from 1 April 2001. Since this date, new employees have been invited to join the Oxford Instruments Stakeholder Plan, a defined contribution scheme. The Scheme is also closed to future accrual.

The Oxford Instruments Group policy for charging net defined benefit costs to participating entities states that member costs are charged directly to a participating company if that member is also an employee of said participating company. The costs of scheme members that are no longer employees of any participating company or directly affiliated with a Group company are allocated on the basis of the participating company's scheme members as a percentage of the total scheme members that are also employees of participating companies.

The policy for determining contributions to be paid by participating companies is the same as that for charging net defined benefit costs.

Details of the scheme, its most recent actuarial valuation and its funding can be found in Note 25 to the Group Financial Statements. The contributions paid by the Company to the Oxford Instruments Pension Scheme were £1.6m (2017: £0.4m).

#### Stakeholder pension scheme

The Company makes contributions to a stakeholder pension scheme. The pension costs charge for the year represents contributions payable by the Company to the scheme. These amounted to £0.1m (2017: £0.1m). There were no outstanding contributions at the end of the financial year (2017: £nil).

# Notes to the Parent Company Financial Statements continued

year ended 31 March 2018

#### (j) Guarantees

The Company has given a guarantee to the pension scheme in respect of the liability of its UK subsidiaries to the pension scheme. The guarantee is for the excess of 105% of the liabilities of the scheme, calculated on the basis of Section 179 of the Pensions Act 2004, over the assets of the scheme.

The Company and its UK subsidiaries have entered into a cross-guarantee for £10.0m (2017: £10.0m) in respect of overdraft facilities of which £nil (2017: £nil) was drawn at the year end.

#### (k) Commitments

At 31 March 2018, capital commitments contracted were fnil (2017: fnil) and authorised were fnil (2017: fnil).

#### (I) Subsequent events

See Note 33 to the Group Financial Statements for details of dividends paid or declared after the Balance Sheet date.

#### (m) Related party transactions

The Company has a related party relationship with its Directors and Executive Officers and with its wholly owned subsidiary companies.

Transactions with key management personnel are disclosed in the Remuneration Report on pages 67 to 80. There were no other significant transactions with key management personnel in either the current or preceding year other than the following:

During the year the Company paid fini (2017: f0.1m) to Imperialise Limited, a company for whom Nigel Keen, former Chairman, is a Director. The payment was for his services as Chairman of the Group. The liability due to Imperialise Limited at the year end was fini (2017: finil).

# Historical Financial Summary as at 31 March 2018

	2014 £m	2015 £m	2016 £m	2017 £m	2018 £m
Consolidated Statement of Income					
Revenue from continuing operations	249.2	282.4	270.3	300.2	296.9
Adjusted operating profit from continuing operations	40.2	36.4	38.0	38.0	46.5
Other operating income	_	_		_	3.3
Contingent consideration deemed no longer payable	_	_	4.9		_
Reversal of acquisition related fair value adjustments	(3.7)	(0.2)	(1.0)	_	_
Acquisition related costs	(7.8)	(2.2)	(2.5)	(0.3)	_
Loss on disposal of subsidiary undertakings	_	_	(0.9)	(0.4)	_
Contingent consideration – further amount deemed payable	_	(6.8)	_	_	_
Restructuring costs	_	(8.7)	(2.9)	(0.4)	(1.2)
Restructuring costs – relating to associate	_	_	(1.3)	(0.4)	(0.4)
Settlement loss on US pension scheme	(0.1)	_	_	_	_
Impairment of investment in associate	_	_	_	(8.0)	(2.0)
Impairment of internally generated intangible assets	_	_	_	(2.9)	_
Impairment of acquired intangibles	_	_	_	(33.8)	_
Amortisation of acquired intangibles	(12.6)	(17.1)	(12.7)	(12.5)	(10.9)
Fair value movement on financial derivatives	4.1	(4.8)	(2.7)	1.2	3.1
Operating profit/(loss) from continuing operations	20.1	(3.4)	18.9	(19.5)	38.4
Net financing costs	(4.1)	(8.2)	(8.4)	(6.7)	(4.2)
Profit/(loss) before taxation from continuing operations	16.0	(11.6)	10.5	(26.2)	34.2
Income tax (expense)/credit	(3.1)	4.9	(2.9)	0.7	(14.6)
Profit/(loss) for the year from continuing operations	12.9	(6.7)	7.5	(25.5)	19.6
Adjusted profit before tax from continuing operations <sup>1</sup>	37.0	29.2	30.4	31.5	42.3
Consolidated Statement of Financial Position					
Property, plant and equipment	34.4	33.1	35.2	32.5	22.8
Intangible assets	247.9	231.3	220.8	181.0	158.7
Investment in associate	_	_	13.1	3.9	4.1
Long-term receivables	_	_	3.4	3.6	1.4
Deferred and current tax	(3.5)	14.6	13.9	18.1	3.6
Inventories	68.3	70.8	61.1	53.9	45.9
Trade and other receivables	86.2	90.7	79.0	81.7	73.9
Trade and other payables	(112.8)	(126.5)	(108.2)	(98.0)	(84.1)
Net assets excluding net cash	320.5	314.0	318.3	276.7	226.3
Cash and cash equivalents	32.6	25.1	21.8	27.2	20.7
Bank overdrafts	_	_	(1.4)	(0.7)	_
Bank borrowings	(156.9)	(144.0)	(148.6)	(135.8)	(40.4)
Net debt	(124.3)	(118.9)	(128.2)	(109.3)	(19.7)
Provisions and other items	(9.7)	(16.1)	(12.1)	(9.8)	(11.7)
Retirement benefit obligations	(46.3)	(53.5)	(35.0)	(25.1)	(15.3)
Net assets employed/capital and reserves attributable					
to the Company's equity holders	140.2	125.5	143.0	132.5	179.6

# Historical Financial Summary continued as at 31 March 2018

	2014 £m	2015 £m	2016 £m	2017 £m	2018 £m
Cash flow	200	2.00	2	2.00	
Net cash from operating activities	11.2	17.9	34.4	27.4	27.5
Net cash (used in)/generated from investing activities	(175.0)	(11.7)	(35.2)	(6.6)	67.8
Net cash from/(used in) financing activities	151.3	(19.8)	(6.0)	(20.2)	(103.1)
Net (decrease)/increase in cash equivalents from continuing operations	(12.5)	(13.6)	(6.8)	0.6	(7.8)
	pence	pence	pence	pence	pence
Per ordinary share					
Earnings – continuing	22.6	(11.7)	13.1	(44.7)	34.3
Adjusted earnings <sup>2</sup>	54.8	41.2	41.0	41.5	56.3
Dividends	12.4	13.0	13.0	13.0	13.3
Employees					
Average number of employees	2,050	2,420	2,077	1,974	1,642

1. Comparative figures have been restated to account for the disposal of the Group's Industrial Analysis business.

2. Adjusted numbers are stated to give a better understanding of the underlying business performance. Details of adjusting items can be found in Note 1 to the Group Financial Statements.

# **Directors and Advisers**

#### **Honorary President**

Sir Martin Wood OBE FRS Hon FREng DL

#### **Company Secretary**

Susan Johnson-Brett ACIS

#### **Board Committees**

Audit and Risk Mary Waldner, Chairman Stephen Blair<sup>1</sup> Richard Friend Thomas Geitner

#### Nomination

Alan Thomson, Chairman Stephen Blair<sup>1</sup> Richard Friend Thomas Geitner Mary Waldner

#### Remuneration

Thomas Geitner, Chairman Stephen Blair<sup>1</sup> Richard Friend Mary Waldner Alan Thomson

#### Administration

Any two Directors

 Stephen Blair was appointed to the Audit and Risk, Nomination and Remuneration Committees on 1 July 2017.

#### Auditor

KPMG LLP

#### **Principal Bankers**

HSBC Bank plc Santander plc The Royal Bank of Scotland plc

#### Stockbroker

JPMorgan Cazenove

#### **UK Solicitors**

Laytons Solicitors LLP Ashurst LLP

#### US Counsel

Wilmer Hale LLP

# **Oxford Instruments Directory**

Company/address		Country	Telephone	Fax	Email
Oxford Instruments Head Office					
Tubney Woods, Abingdon, Oxfordshire OX13 5QX, UK		UK	+44 (0)1865 393200	+44 (0)1865 393333	info.oiplc@oxinst.com
Materials & Characterisation					
Oxford Instruments NanoAnalysis					
Halifax Road, High Wycombe, Buckinghamshire HP12 3SE, UK	Systems for materials analysis at the nanoscale	UK	+44 (0)1494 442255	+44 (0)1494 524129	nanoanalysis@oxinst.com
Arenavägen 41, 10th floor, 121 7 Johanneshov, Sweden	Systems for materials analysis at the nanoscale	Sweden	+46 8 5448 1550	+46 8 5448 1558	nordiska@oxinst.com
Asylum Research					
6310 Hollister Ave, Santa Barbara, CA 93117 USA	Systems for materials analysis at the nanoscale	USA	+1 (805) 696 6466	+1 (805) 696 6444	sba.sales@oxinst.com
Borsigstraße 15A, 65205 Wiesbaden, Germany		Germany	.+4961229370	+49 621 762117 11	sba.de.sales@oxinst.com
Room 304, Building 52, No. 195, Section 4, ZhongXing Road, ZhuDong Township, XinZhu County,					
310 Taiwan		Taiwan	+886 3 5788696	+886 2 2794 2757	sba.tw.sales@oxinst.com
Halifax Road, High Wycombe, Buckinghamshire HP12 3SE, UK		UK	+44 (0)1494 442255	+44 (0)1494 524129	sba.uk.sales@oxinst.com
Oxford Instruments Plasma Technology					
North End, Yatton, Bristol BS49 4AP, UK	Tools for nanotechnology fabrication	UK	+44 (0)1934 837000	+44 (0)1934 837001	plasma@oxinst.com
Research & Discovery					
Andor/Bitplane/Spectral					
7 Millennium Way, Springvale Business Park, Belfast, BT12 7AL UK	Scientific imaging cameras, spectroscopy solutions and microscopy systems	UK	+44 (0)28 9023 7126	+44 (0)28 9031 0792	info@andor.com
Badenerstrasse 682, CH-8048 Zürich		Switzerland	+41 44 430 11 00	+41 44 430 11 01	info@bitplane.com
2 East Beaver Creek Road, Building 2, Richmond Hill, ON Canada L3B 2N3		Canada	+1 (905) 326 5040	+1 (905) 326 5041	info@spectral.ca
Oxford Instruments NanoScience & Magnetic Resonance					
Tubney Woods, Abingdon, Oxfordshire OX13 5QX, UK	Advanced tools for applied research	UK	+44 (0)1865 393200	+44 (0)1865 393333	nanoscience@oxinst.com magres@oxinst.com
Oxford X-Ray Technology					
360 El Pueblo Road, Scotts Valley, CA 95066, USA	X-ray tubes and detectors	USA	+1 (831) 439 9729	+1 (831) 439 6051	xray-sales@oxinst.com
Service & Healthcare					
OiService CT & MR					
1027 SW 30th Avenue, Deerfield Beach, FL 33442, USA		USA	+1 (954) 596 4945	+1 (954) 596 4946	oiservice@oxinst.com
64 Union Way, Vacaville, CA 95687, USA		USA	+1 (707) 469 1320	+1 (707) 469 1318	oiservice@oxinst.com
120 Enterprise Drive, Ann Arbor, MI, 48103, USA		USA	+1 (888) 323 1316	+1 (734) 822 1011	info@mobileleasing.com info@medimagingsales.con

Company/address	Country	Telephone	Fax	Email
Regional Sales and Service Offices				
Oxford Instruments/Canada/ Latin America				
300 Baker Avenue, Suite 150, Concord, MA 01742, USA	USA	+1 (978) 369 9933	+1 (978) 369 8287	info@ma.oxinst.com
Oxford Instruments Technology, China				
Floor 1, Building 60,				
No. 461, Hongcao Road, Xuhui District, Shanghai, 200233	China	400 678 0609	+86 21 6127 3828	china.info@oxinst.com
Building B2 West, No. 11 West Third Ring North Road, Haidian District, Beijing, 100085	China	400 678 0609	+86 10 5884 7901	china.info@oxinst.com
Room 3312, Building B3, Hanxi East Road, NanCun Town, Panyu District, Guangdong Province,				
511446, Guangzhou	China	400 678 0609	+86 20 8478 7349	china.info@oxinst.com
Room 2201B, Central Plaza 1, No. 8 Shuncheng Street, Jinjiang District, Chengdu,				
Sichuan Province, 610024	China	400 678 0609	+86 28 8620 1871	china.info@oxinst.com
Oxford Instruments Czech Republic				
Velvarska 13, CZ-160 00 Praha, Czech Republic	Czech Republic	+420 233 343 264	+420 234 311 724	Czech.info@oxinst.com
Oxford Instruments France				
77 ZA de Montvoisin, 91400 Gometz la Ville, France	France	+33 1 69 85 25 25	+33 1 69 41 46 80	infofrance@oxinst.com
Oxford Instruments Germany				
Borsistrasse 15a, 65205 Wiesbaden, Germany	Germany	+49 6122 9370	+49 6122 937100	info-oiplc@oxinst.com
Oxford Instruments India				
11, Marwah's Complex, Krishanlal Marwah Marg, Andheri East, Mumbai 400072, India	India	+91 224 4253 5100	+91 224 4253 5110	india@oxinst.com
Oxford Instruments Japan				
IS Building 3-32-42, Higashi-Shinagawa, Shinagawa-ku Tokyo 140-0002, Japan	Japan	+81 (0)3 6732 8961	+81 (0)3 6732 8937	info.jp@oxinst.com
Shin Osaka Sun R Building 10th Floor, 5-8-3 Nishi-Nakajima, Yodogawa, Osaka, 532-0011, Japan	Japan			info.jp@oxinst.com
Oxford Instruments Korea				
No. 8-S 26, 8F., 10 Chungmin-ro, Songpa-gu, Seoul 138-962 Korea (Republic of)	Republic of Korea	+82 2 2008 4500	+82 2 2008 4555	nanoanalysis@oxinst.com
Oxford Instruments Russia				
Denisovskiy per. 26, Moscow 105005, Russian Federation	Russia	+7 (095) 933 51 23	+7 (095) 933 51 24	russia.info@oxinst.com
Oxford Instruments Singapore				
10 Ubi Crescent, #04-81 Ubi TechPark Lobby E, Singapore 408564, Republic of Singapore	Singapore	+65 6337 6848	+65 6337 6286	Singapore.info@oxinst.com
Oxford Instruments Taiwan				
2F-1, No. 27, Kuang-Hsin Road,Hsin-Chu Taiwan 300, Taiwan, R.O.C.	Taiwan	+886 3 5788696	+886 3 5789993	Taiwan.info@oxinst.com



The paper used in this report is produced using virgin wood fibre from well-managed forests with FSC<sup>®</sup> certification. All pulps used are elemental chlorine free and manufactured at a mill that has been awarded the ISO 14001 and EMAS certificates for environmental management. The use of the FSC<sup>®</sup> logo identifies products which contain wood from well-managed forests certified in accordance with the rules of the Forest Stewardship Council.

Printed by CPI Colour, an FSC<sup>®</sup> and ISO 14001 accredited company, who is committed to all round excellence and improving environmental performance as an important part of this strategy.

Designed and produced by **Iyons**bennett www.lyonsbennett.com





#### Find out more online

www.oxinst.com/investors



For more information please email: <code>investors@oxinst.com</code>

This publication is the copyright of Oxford Instruments plc and provides outline information only, which (unless agreed by the Company in writing) may not be used, applied or reproduced for any purpose or form part of any order or contract or regarded as the representation relating to the products or services concerned. Oxford Instruments' policy is one of continued improvement. The Company reserves the right to alter, without notice, the specification, design or conditions of supply of any product or service. Oxford Instruments acknowledges all trademarks and registrations. © Oxford Instruments plc, 2018.

All rights reserved.

